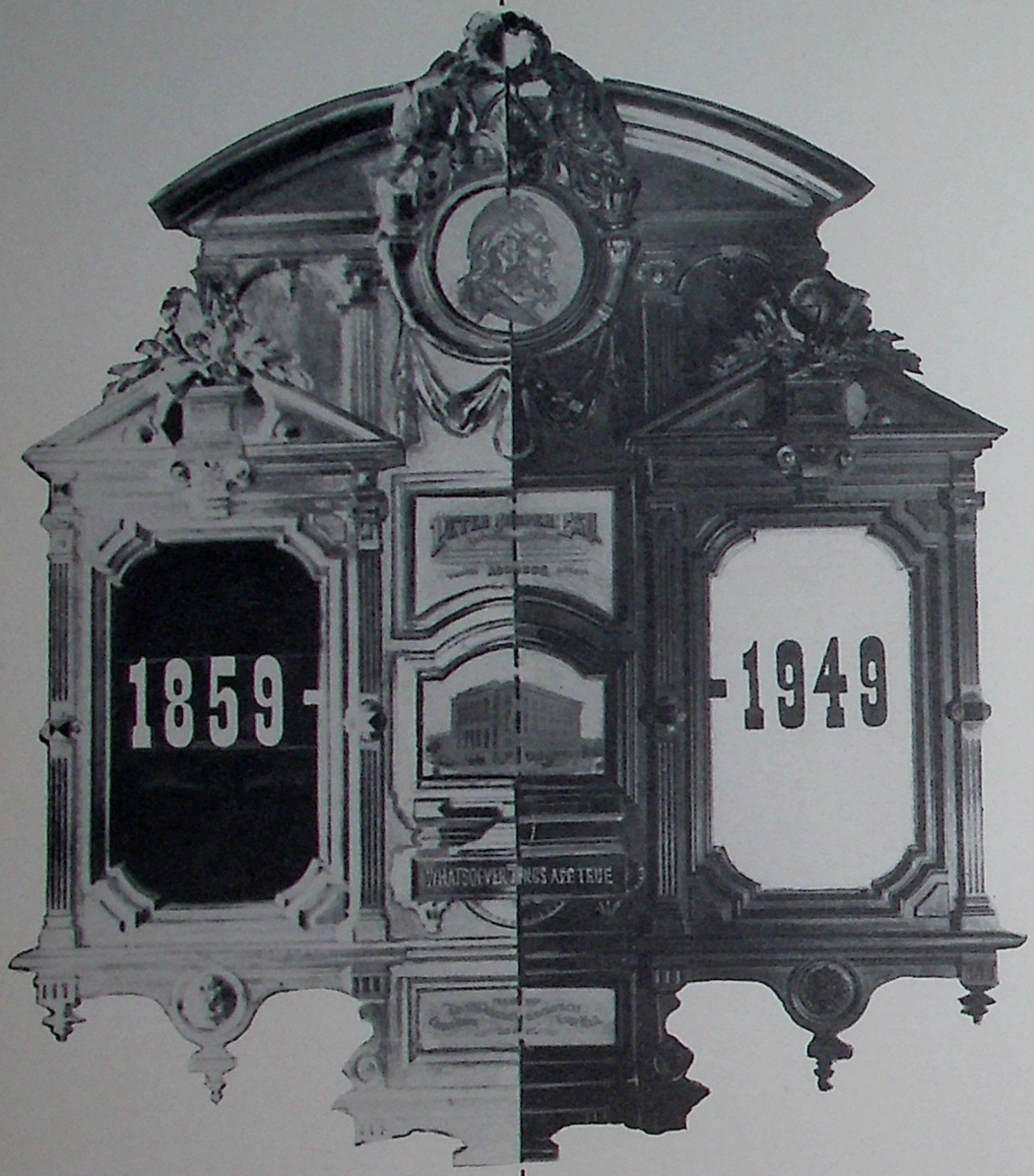
'49

the CABLE – ninetieth anniversary issue

Dedicated to

the next ninety years



the CABLE

the Cooper Union for the advancement of science and art

90

the ninetieth anniversary issue

"The great object I desire to accomplish by the establishment of an institution devoted to the advancement of science and art, is to open the volume of nature by the light of truth— so unveiling the laws and methods of Deity, that the young may see the beauties of creation, enjoy its blessings, and learn to love the Being from whom cometh every good and perfect gift."

—Peter Cooper, 1859

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Former Head of the E.E. Department

LEBOLT

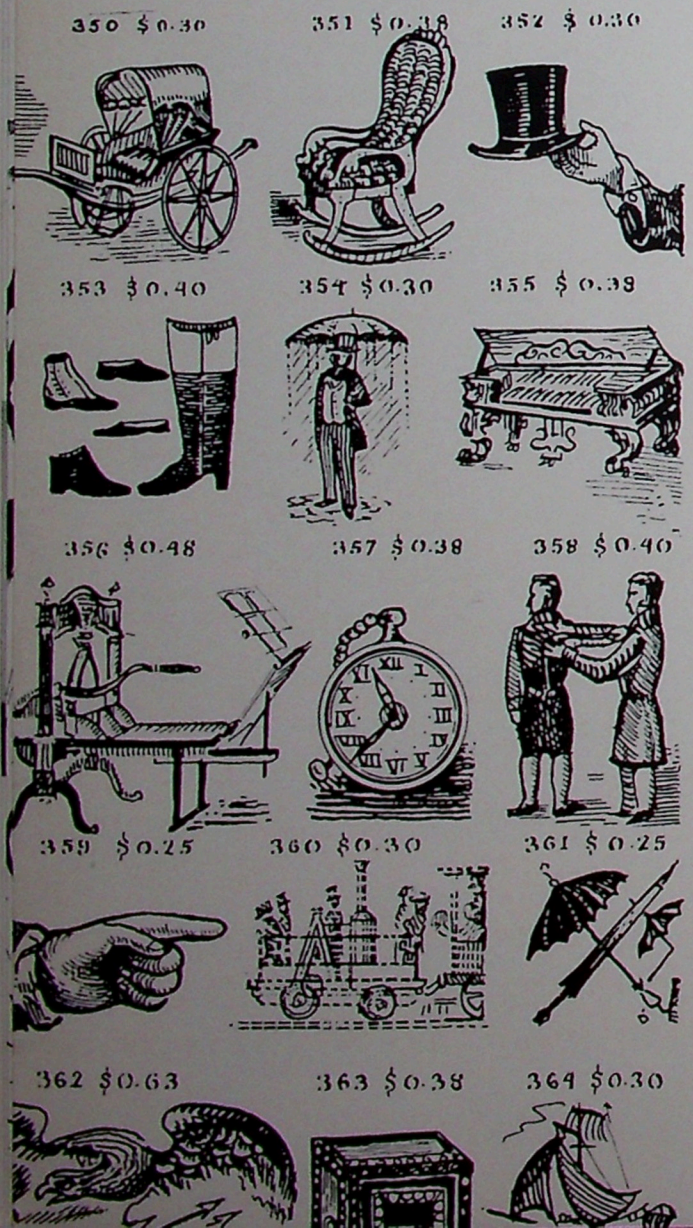
IN RETROSPECT

Amid the hustle of the city, there stands a building of red sandstone. For ninety years it has stood through war and peace, through depression and prosperity, watching the city grow. In the quiet serenity of New York before the Civil War, it saw the buildings rise from the rock of the island until it no longer was a part of the proud skyline. Rapidly, the ribbons of steel shot skyward and the streets below were tunneled for subways until it was almost forgotten amid the hustle of the city.

It has seen the great ride by in their carriages and limousines, and it has seen the underdog slink through the dark canyons of the Bowery. It has heard the happy bells pealing out the messages of peace, and it has felt the fearful shudders of war. For ninety long years it has watched over the city. What is the story of this building, of the institutions, traditions, and individuals that have made it a "working ideal for ninety years"?

Cooper Union Library

90 years



Today, ninety years after its establishment, Cooper Union still operates under the mandate originated by its founder, when with sincere eloquence he established the school under his oft-referred-to *Deed of Trust*. Existing accounts do not give too clear a picture of how Peter Cooper conceived his free school. Education, of course, was in the air. These were the times when Horace Mann and Dewitt Clinton were pioneering in the field of education. Peter Cooper wanted more than anything else to expand the opportunities for the young working man and woman in order that they might escape the hardships with which he had had to cope.

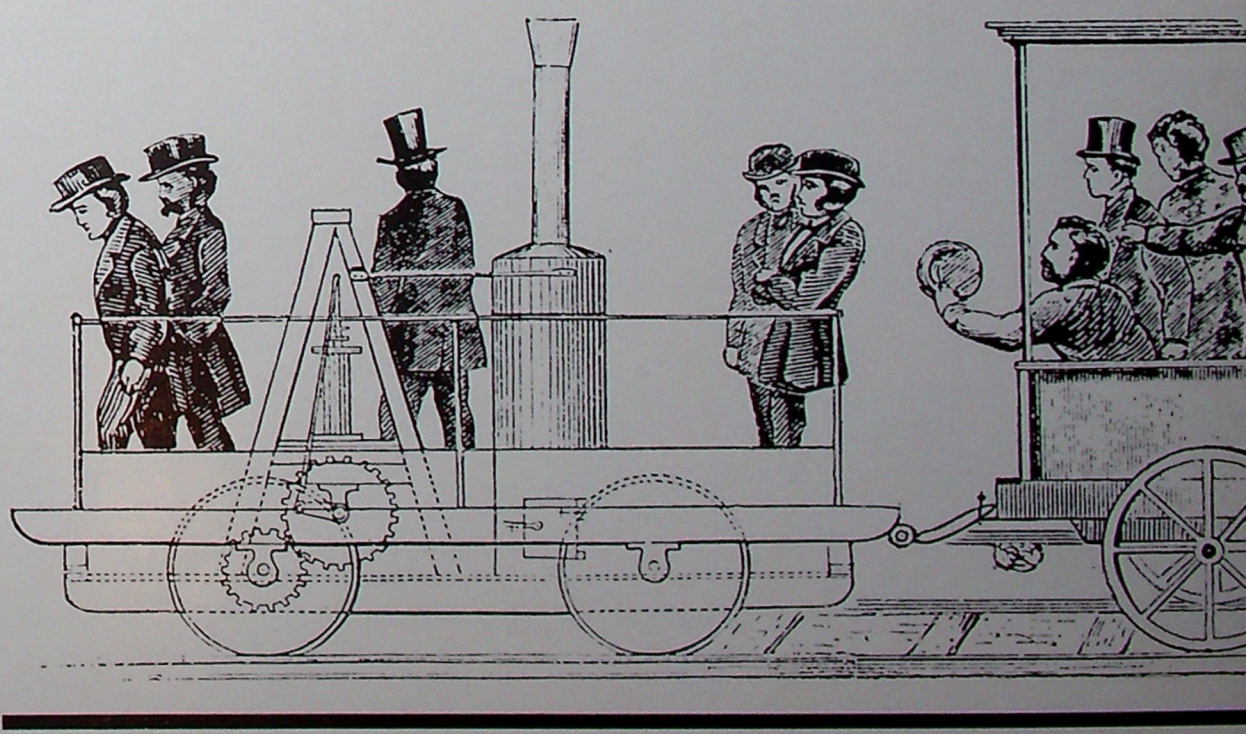
The full concept of education developed by Peter Cooper contained five major objectives. In addition to night courses and a school for "instructing respectable females in the arts of design," Cooper provided for the support and maintenance of a free reading room, scientific collections and art galleries, the establishment of a polytechnic school, and the development of a society of Cooper Union Associates. In developing art and engineering courses, Cooper conceived of the two fields as closely related. Coupling them for study was an original idea with him and is only now coming into general acceptance. With the exception of the clause requiring the society of Associates, the terms of the *Deed of Trust* have been carried out, with all activities centering at Cooper Square, site of the Foundation Building.

The history of the Foundation Building is in itself a story. Peter Cooper planned it years before he accumulated funds to start construction. From 1825 to 1854, his fortune doubled and tripled many times. In 1854 the cornerstone was laid but delays followed and it was five years before the building was completed and ready for use. At Cooper's insistence, architect Frederick A. Peterson included many novel features in the building plans. Wrought iron beams were used for strength and lightness, a pioneering construction method at that date. Another new feature was the circular elevator shaft. Cooper also planned a system of mechanical ventilation, stores on the first two floors, the great hall, a roof garden, and a cosmorama.

Not all these ideas were carried out, however, for Cooper was persuaded to revise them by his advisers. A free reading room took the museum's place and the huge stuffed whale which Cooper had bought for his museum finally found a home in the Museum of Natural History where today it still floats in eerie half-light above the special exhibition hall. The space planned for the cosmorama was made into a laboratory and the roof garden plans were abandoned.

Cooper Union was ready to start life on July 1, 1859. Night classes were organized at once in pure and applied mathematics, chemistry, natural philosophy, theoretical and practical mechanics, architectural, mechanical, and free-hand drawing, and theoretical and practical vocal music.

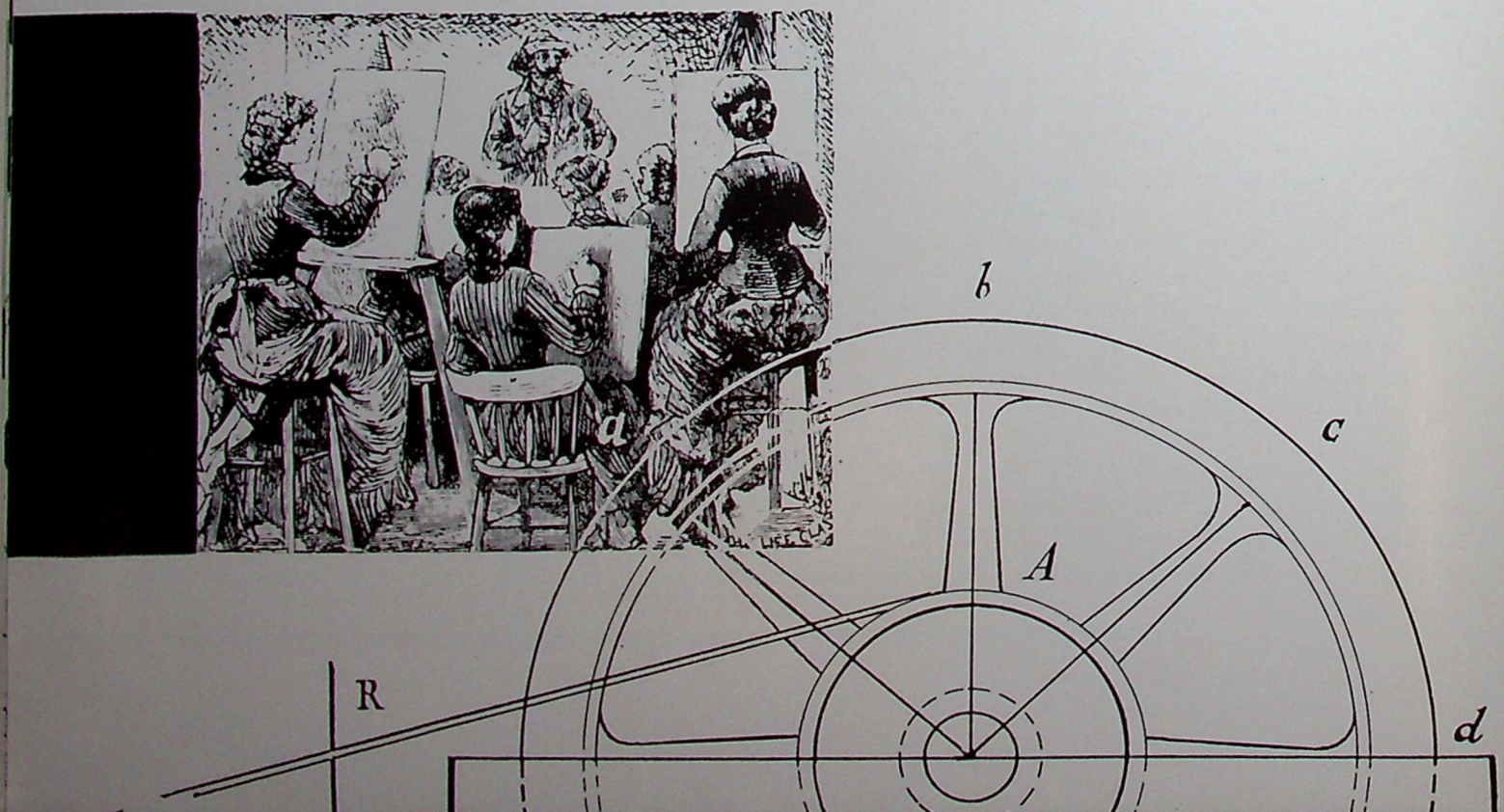
From the first year of its existence Cooper Union attracted more students than it could handle. By the end of the Civil War, fifteen hundred students were on its rosters. Its first graduates, "two clerks, an engraver, a machinist, and a coachmaker" received diplomas and medals, a tradition carried down to this day. In its tenth year, 1767 students registered and by 1883, its twenty-fifth year, registration had reached 3757. Today, exigencies of space and resources limit admissions to about 2000.



"A noteworthy feature" of Cooper Union, wrote one of its chroniclers, "was the complete obliteration of all distinctions of class, creed, race, or sex." Thus the school's records do not tell us whether the first Negro student had entered before the Civil War, or when its first Jewish student was accepted. Considering Peter Cooper's concern for the "female portion of the community" we know that women were accepted at once.

The 1860's saw a widening rift appear between the trustees of the Art School and the leading artists of the day. The trustees stood for the industrial arts, while the artists insisted that emphasis in art education should be placed on the fine arts. The trustees seemed to have won, as classes in telegraphy, photography, shorthand, and wood engraving were started in the 1870's. With the invention of the typewriter, classes were opened in 1881 instructing women in typing.

At this time, the United States was witnessing a movement which sponsored institutions, clubs, and societies for the preservation and advancement of art in this country. As part of the movement, two grand-daughters of Peter Cooper, Sarah and Eleanor Hewitt, asked the trustees for room for a Museum for the Arts of Decoration, in accordance with Peter Cooper's

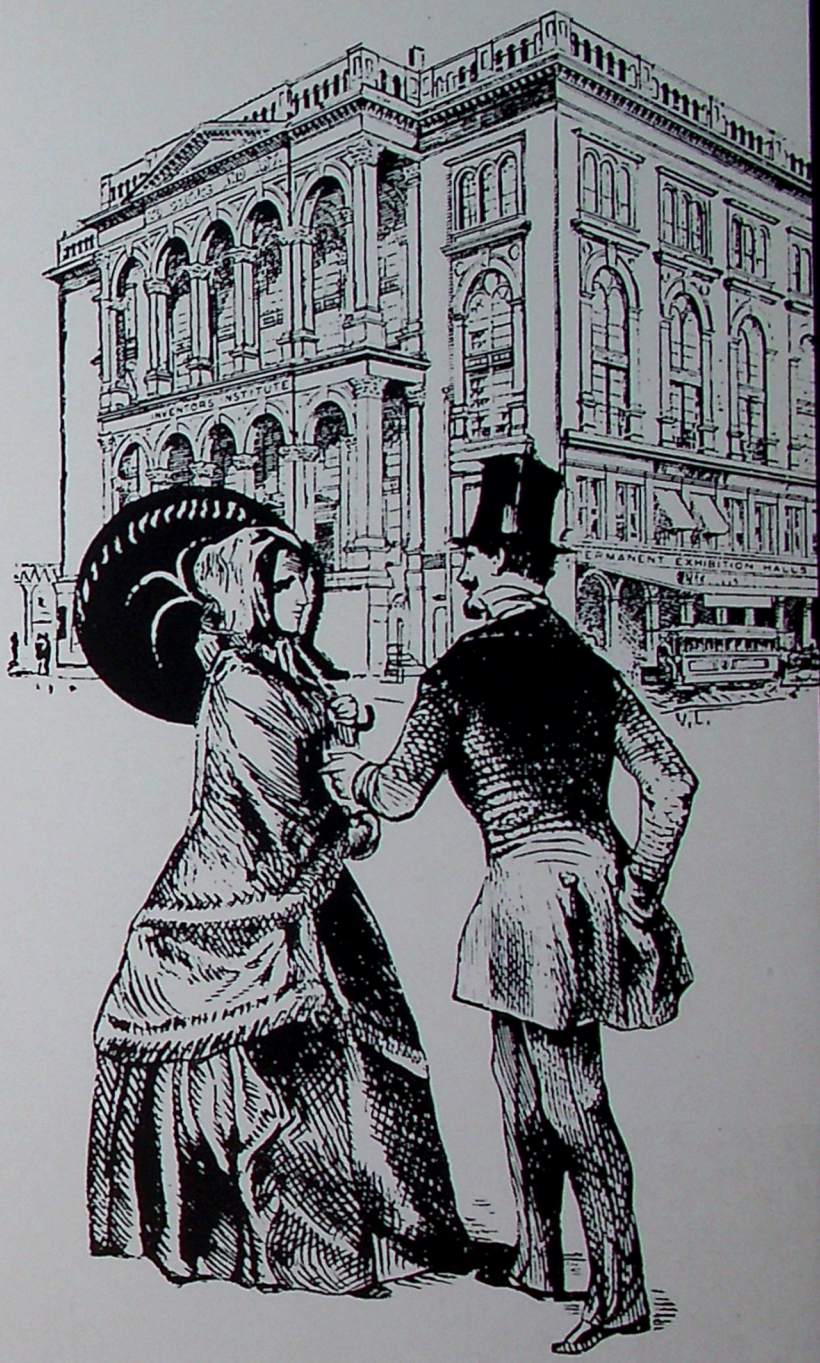


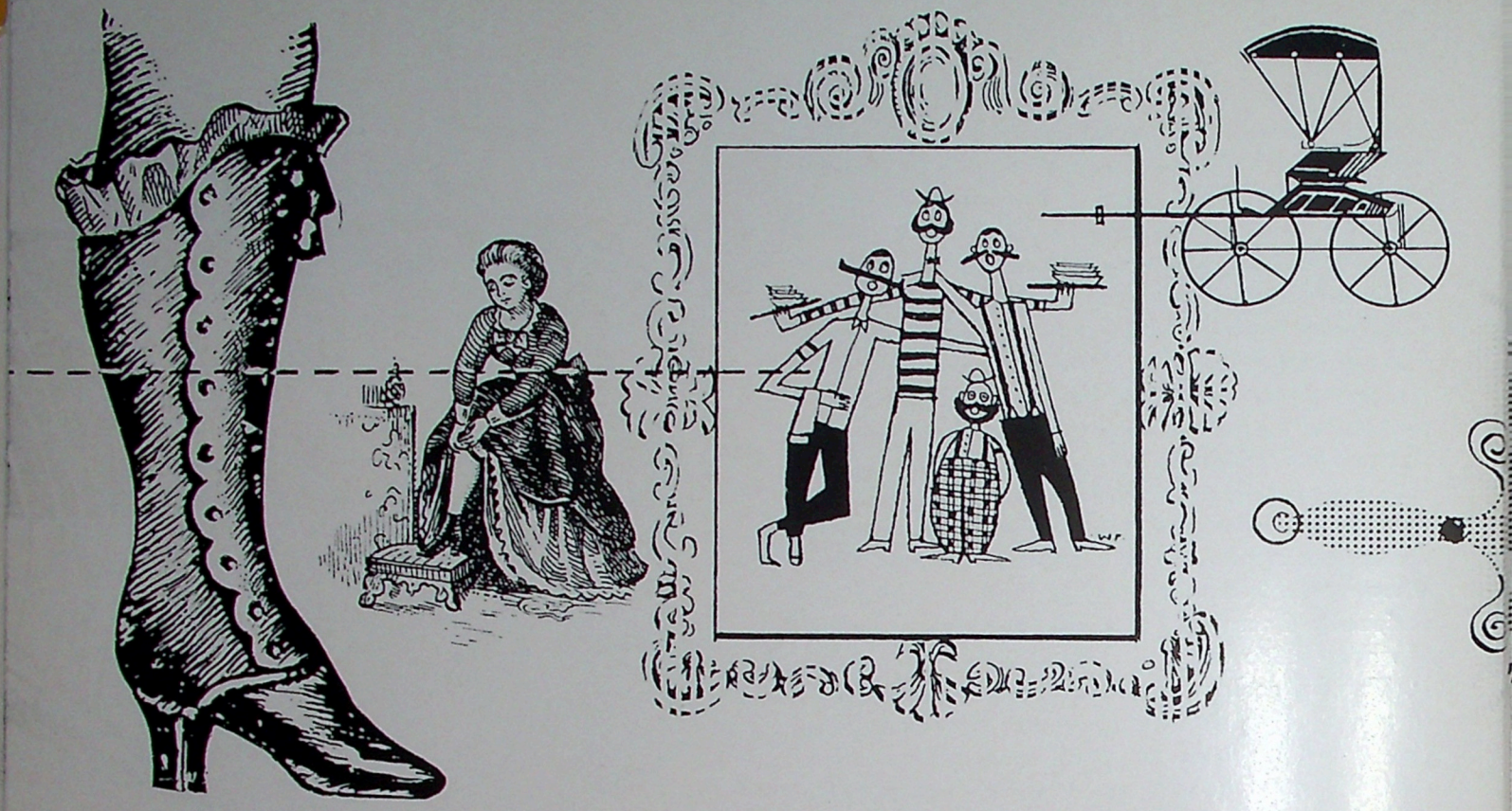
wishes as stated in the *Deed of Trust*. In May, 1897, the Museum was opened and today its collections are rich in many fields and are used as design sources by industrialists and many others. The Art School, riding along on the wave of enthusiasm in the founding of the Museum, was slowly developing its three-year curriculum. It was not until the 1930's that it was noticed that Cooper Union was turning out artists who copied their designs from past artists instead of creating their own work. Dean Austin Purves spearheaded the housecleaning with new instructors and better teaching methods, which gave the students a chance to realize their talents and use them to create. Dean Purves was followed by Guy Gaylor Clark, who rationalized some of his predecessor's more radical ideas until his death in 1945. Today, Dean Dana P. Vaughn seeks to find out how the school can turn out artists that can best serve the community. Courses in English, literature, philosophy of art, contemporary thought, and cultural traditions are taught in addition to the more specialized art courses.

Along with the development of the Art School, the Polytechnic School, operating in the evening until 1900, took on more formal characteristics when it developed from the independent courses in the basic sciences to an integrated curriculum in the years following the Civil War. Advanced courses in the specialized fields of engineering were added to fill out the curriculum, and laboratory courses supplemented the work. In 1900, the growing endowment fund freed Cooper Union from the necessity of renting out part of its space to stores, and the added space made possible the establishment of the day polytechnic institute. In 1912, the Engineering School was moved to the Hewitt Building, named in honor of Abram S. Hewitt, Cooper's business partner and son-in-law.

The three-story Hewitt Building houses the laboratories, lecture halls and classrooms of the Physics, Mechanical, Electrical and Civil Engineering Departments. With these new facilities, engineering became a profession at Cooper with both day and evening courses leading to a bachelor's degree.

In the past decade the engineering school has led the way in the introduction of Humanities studies into engineering curriculae. This movement was encouraged by Dr. Edwin S. Burdell, Director





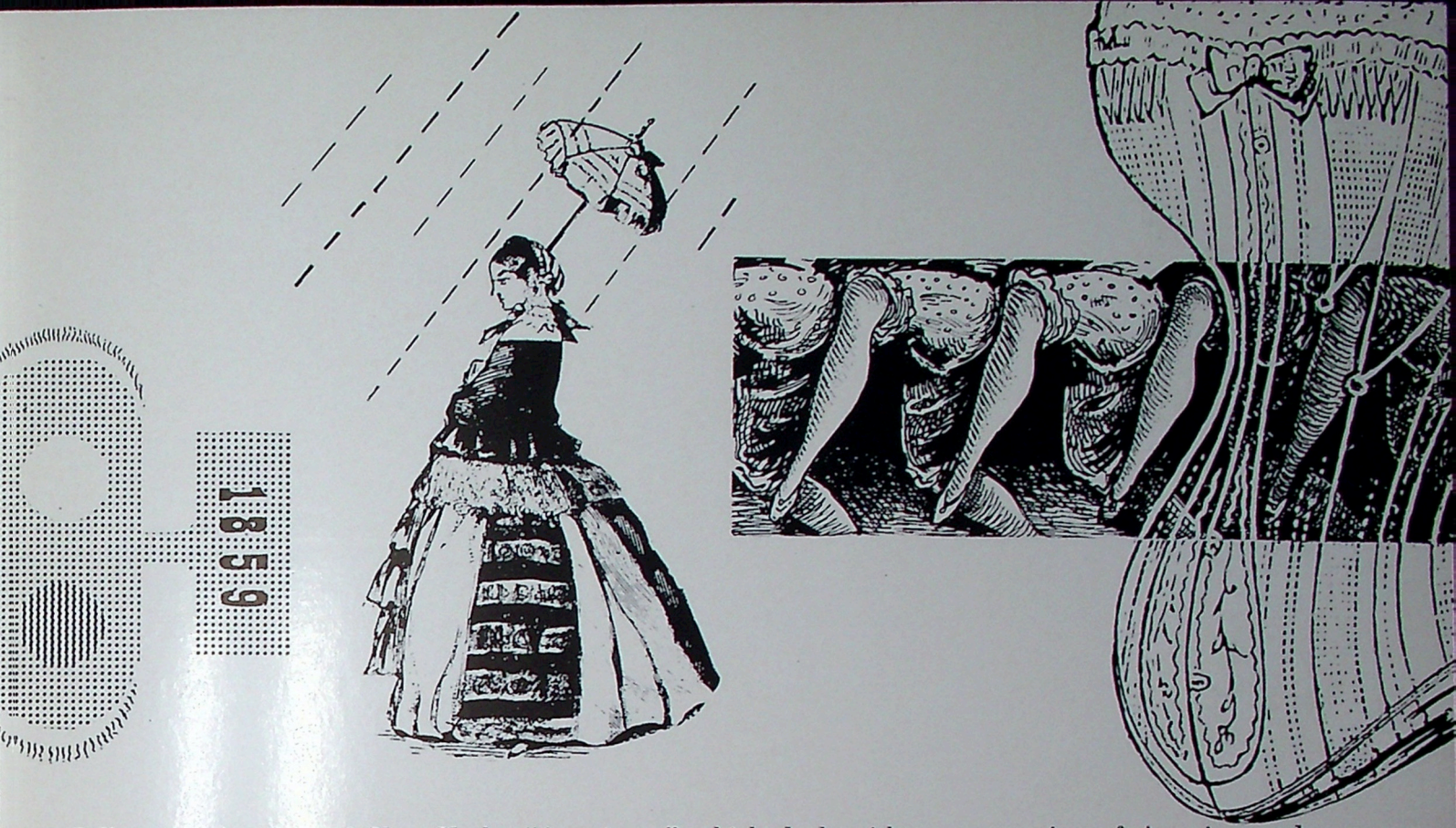
of The Cooper Union, and the late Dean George F. Bateman.

Today, twenty per cent of the Cooper Union Engineering Curriculum is devoted to Humanities. This is of particular interest in these post-war days, when attempts are being made to show the students the responsibilities of the scientist in the new atomic age.

The most recent addition to The Cooper Union is a unique educational project, the Green Engineering Camp. It was donated to The Cooper Union in 1940 by Norvin Hewitt Green, Peter Cooper's grandson, as a memorial to his mother, Amy Hewitt Green. The camp is used for summer surveying, geology, and landscape painting courses, as well as for the freshmen orientation sessions and the recreational weekends for artists and engineers.

Another unique division of Cooper is the Great Hall. Here every American President from Lincoln to Wilson has spoken. In addition the Democratic Party at one time held their initial campaign meetings in the Great Hall. Even today it is popular for political meetings; Governor Dewey concluded his last gubernatorial campaign there.

Here The Cooper Union Division of Social Philosophy presents lectures three times a week from October to April, free to the public. The lectures are divided into three series, each with its own theme, the broad scope of which can only be hinted at in their titles. Recent subjects included "The Meaning of Human History" based on a book by the late Morris Cohen, Professor of Philosophy at the



College of the City of New York; "Americana" which dealt with a cross-section of American culture; "Philosopher's House" a forum on the active schools of philosophy in our country; "Arts and Civilization," showing the importance of man-made objects in understanding the bygone civilizations.

The influence of this department of the Cooper Union is measured by the statistics of last year when 81,700 people participated in 76 regular sessions. The list of speakers in the Great Hall, both recently and in former years, reads like a "Who's Who in the Intellectual World." Here Robert Ingersoll delivered one of his first lectures on religion and John Tyndall presented his classic demonstration on light. Here also Mark Twain discoursed on the Hawaiian Islands and Henry Ward Beecher talked on the issues of the day. In more recent years, the names of Robert Moses, James Couant, Norman Cousin, Clifton Fadiman, Raymond Massey, Margaret Webster, Mrs. Franklin D. Roosevelt, Dr. Bryn Hovde, Sir Norman Angell, and many others are to be found on the list of speakers of the Cooper Union Forum.

Since 1938, the directorship of the Cooper Union has been in the hands of Dr. Edwin S. Burdell, who previously was Dean of Humanities at the Massachusetts Institute of Technology. As a proponent of scientific humanism, Dr. Burdell has a philosophy which may, in this peacetime period, resolve the dilemma of science and art. It is possible, by a rigid argument, to debate the older arts out of existence in a technological society. What merit have traditional sculpture and painting, in esthetic terms, that a dynamo or streamlined diesel does not have? In other words, devotees of technology derive intense pleasure from the contemplation of the austere beauties of the laboratory, the power-driven machine, the precision-turned crankshaft or axle, high-tension transformers, and a million and one useful objects, both production goods and consumption goods. Can we safely assume that all esthetic needs will be satisfied by these expressions, beautiful though they are in their own right? Yet the scientist commands a hearing in technological society while the artist does not. Is this a failure of the artist or of society?

No one school could answer these embracing questions, and no school could make much of a start at answering them during the emergency of war. Thus, one may assume that today Cooper Union is about to enter its latest and perhaps most important phase, the synthesis of science and art in education which Peter Cooper envisioned more than a century ago when he wrote that his earnest desire was "to unite all in one common effort, to improve each and every human being."

In discussing the underwriting of cultural functions by a proposed National Scientific Foundation, in his annual report for the year ending June 30, 1945, Dr. Burdell wrote in part: "Many people believe that our non-material culture has reached its limit because of the lag between it and our material culture. The scientists . . . perfected the atom bomb and projected us, with one explosion in the New Mexico desert, into a new set of relationships with the universe . . . They have become strangers in a world of their own making. Can they become at home in that very world? Yes, but only if the physical scientists work with social scientists, philosophers, and artists."

He added: "Our civilization has become too complex for any one individual or group of specialists to understand it completely, and hence only by agreement of men of intelligence and good will can we hope to control the more destructive factors." Education's role is therefore to produce men and women who can control destructive factors through the democratic processes. "We cannot solve these problems by government coercion unless the people in fact as well as by symbol are the government."

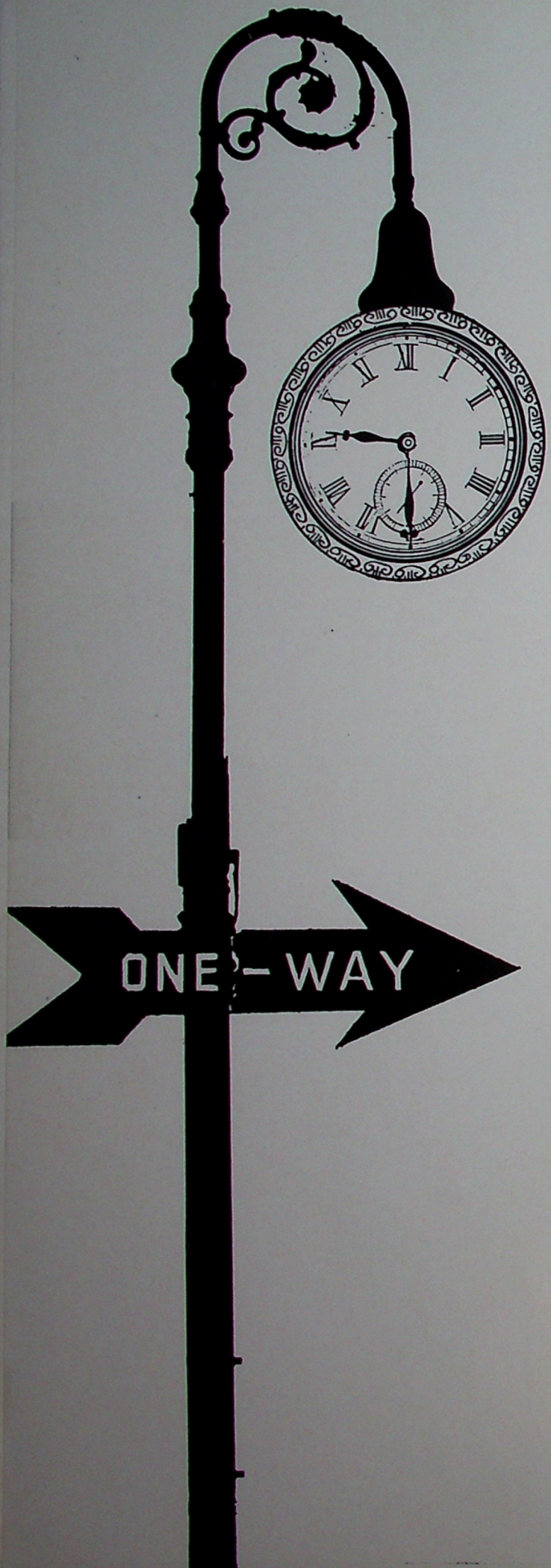
In the report for the period ending June 30, 1946, Dr. Burdell makes his statement of principle: "Scientific humanism means a marriage of science and the accumulated arts of the past; it cannot tolerate separate disciplines moving along parallel lines in accepted grooves of departmentalization. Scientific humanism is a fusion, a synthesis of science, art, and philosophy, a union out of which is born the intellectual life of the future. The product of this educational philosophy will be not merely an engineer or a creative artist but a well-rounded man who has intellectual associations with fields other than his own . . . He will aim to preserve our democratic society because his education has made him not only an artist or an engineer, but a good citizen . . ."

It is with the principles of scientific humanism that the Cooper Union faces the future, confident that the combination of ninety years of experience and a new credo for education can accomplish the purposes of Peter Cooper's ideals. The institution faces the next ninety years with what can be considered the most revolutionary educational idea concerning the marriage of science and art.

Outstanding among the institution's plans for the future are the location of an additional building for the re-housing of the departments of the Engineering School that are now in the Foundation Building; a more extensive use of the Green Engineering Camp in the school's formal education; expansion of the facilities of the Art School; a study of the results of the entrance examination and the choice of students; a study of fatigue, tension, and malnutrition, conducted under conditions of stepped-up mental activity to determine reasons for failure of promising students; and the strengthening of the socio-humanistic stem in the engineering curricula. It is hoped that all these goals will be reached in the next ten years leading up to the institution's centennial.

Quoting from the Director's Report for 1948, "The Cooper Union will continue to promote the democratic rights of free speech and free education, and to help both adults and undergraduates to understand their individual responsibilities to make the community, the nation, and the world, better places to live in." It is with this thought in mind that the Cooper Union looks to the future.

'round the clock at Cooper . . .



Swish of doors . . . push, shove, heave out of the car, race up the stairs and out. The bright light holds you at the curb. You glance at the clock; 9:30, and l-e-i-s-u-r-e-l-y walk across the street, past Oscar, and into school.

up, up, up, UP . . . . no more . . . . OK just you. Like a peg in a square hole. Second floor—files, adding machines, and factors. . . . Third floor—kobos, sokob, and books . . . Fourth floor—rugs, vases and pitchers . . . . Fifth floor—burrettes, aprons and clothespins . . . . Sixth floor—brush, easel and exodus.

The first thing this morning we compare thumbsmudging charcoals and spatula catapulting oils as to their relative values as a medium for miniatures. It might be a lab computation. Soldierlike we unsheath stip slick and determine the end result of the eternal battle: Stress vs. Strain. The answer is one Kip is worth two fudges.

There is nothing like a morning break for that pause that refreshes try a . . . O' Bert—on the "blue card" of course. A mixed jargon of the last class, the next class, or more likely the weekend's score. Holy smoke I never heard the second bell.

Fiends, Leprechauns and Courtesans lend me your ears. The subject for the day is adamnuclear physics . . . or the evetonian influence of Mablo Micaso on contemporary art. All students will take notes on . . . . Lunch bags . . . Unfolding wax paper the student takes that long awaited noon hour break to rest weary muscles and mind. You takes yer cherce—a gab session in the sun or a hand of bridge in the pit . . . this is positively the last hand. I'm fifteen minutes late now.

If I should paint before awake

Sighted steel, sketched sa

He equals high rod

This is Paper . . . and . . . Upon it I shall build a house.

Hickory, dickory, dock.

We ran 'round the clock . . .

At Cooper

this is the surface.

Actually

there is much more.

The following pages

will reveal

Our Green Camp

Ourselves

The main events

of the year

Our student organizations

Our graduates

and

our benevolent contributors

green camp

Located in the valley of the Ringwood River and in the picturesque setting of the historic Ramapo Mountains, there is a thousand acre tract of land called Green Engineering Camp. It was donated to The Cooper Union in 1940 by Norvin Hewitt Green in the memory of his mother, the late Amy Hewitt Green, and in the past nine years since its inception, the camp has become the center of attraction in most of the plans to improve the school both socially and academically.

The past nine years have seen the camp improved continually. The buildings have been remodeled both inside and out, the lawns have been mowed and extended, and the general landscape of the camp improved, until today it has all the aspects of an exclusive country resort. A great deal of the credit for this development rests with Norvin Hewitt Green who has played the role of a conscientious benefactor, J. M. Peterson, the professor-in-charge, and Mr. Harry West, Camp Superintendent.

The camp proper is located on the banks of the winding Ringwood River, a few hundred yards below the falls. It consists of level stretches of mowed ground on which

the dormitory

the lounge

remodelled farm buildings are interdispersed.

Towering over the rest, the red brown dormitory stands serenely at the foot of a hill. This building was once the special barn in which Hewitt's prize Swiss Guernsey cattle were reared. Today, cleverly remodeled for its new function, it provides sleeping quarters for one hundred and fifty men during surveying sessions.

A few feet to the northwest, a long low white building impresses one with its neat appearance. Within, are a student lounge, a huge fireplace, a library, a drafting room, a kitchen and a dining hall. Before some imaginative architect remodeled the building it was a hay barn. The old hand hewn roof beams and carriage wheels can still be seen inside.

On the same side of the lawn as the lounge, is the Administration Building. During the surveying and orientation sessions, it houses the administrative personnel and during the rest of the school year it houses gleeful Cooperites on vacation.

Across the lawn is the caretaker's cottage. Formerly, it was a quaint whitewashed dairy.

The neighborhood surrounding the campus abounds with roads, buildings, grave-

yards and mines of historical significance. They date back to the days of the Dutch patroons when iron was discovered near Ringwood. The mines were developed with imported Negro and Chinese slaves and by the start of the Revolutionary War Ring wood was the center of the iron industry in America. For a portion of the conflict, General George Washington had his headquarters at Ringwood and it was the starting point of Washington's march to Yorktown.

Ringwood, like many another colonial community, has its ghosts. As a matter of fact, more than the usual number of ghostly superstitions float about the place.

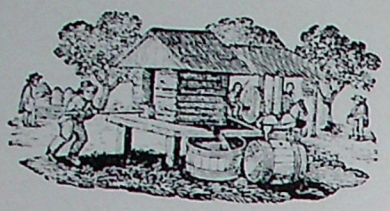
Picture if you can a deserted windswept road that winds its lonely way from mine to darkened mine. Rising ominously above this road, a huge rock, rainwashed and crack scarred stands as the silent headstone of one of Ringwood's most prominent spirits. The name of this spirit has long since been forgotten but it is known that he was one of the earliest settlers and that on dark and gloomy nights he climbs atop his ponderous "Spook Rock" to moan and wail and terrify the unsuspecting traveler. Some say he is the son of a Chinaman and others of a big bulging black conceived on a cold moonless night.

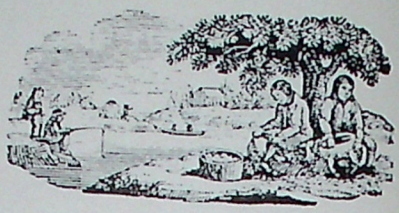
Far beneath Spook Rock, a group of spirits dwell. They are the ghosts of a group of miners who lost their lives in a cave-in in the mines. Ever since the disaster, the miners reported hearing voices of entombed spirits crying out for their comrades among the living to free them. Nearly always, the reports of these voices were followed by another disaster. At the first sound of these uneasy spirits, the miners would flee the mines and would not return until reassured that the danger had passed by the lapse of time.

The most widely known of the Ringwood ghosts is the spirit of John Erskine, chief surveyor and engineer of General Washington's Army. As the story goes, after the trial of Benedict Arnold, Washington returned to Ringwood to begin his march to Yorktown. Washington, Erskine, and Arnold had been classmates and as a result Washington was greatly perturbed by Arnold's treachery and Erskine who resided at Ringwood Manor rode out to meet him and comfort him.

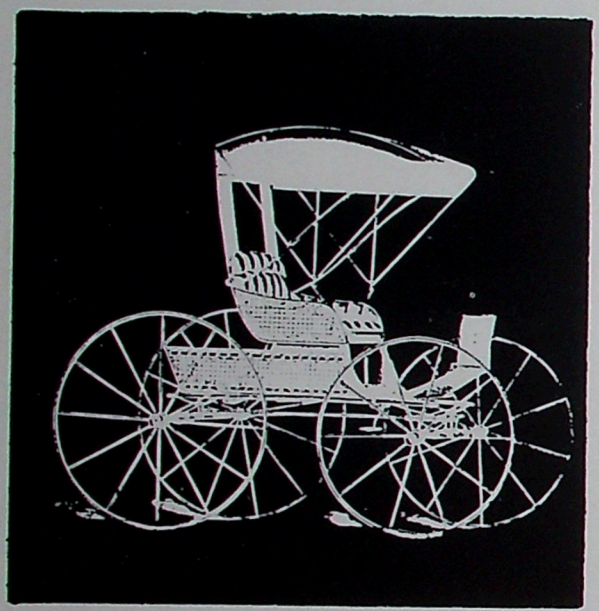
That night General Erskine died of pneumonia and the next day, General Washington, sorely grieved by the loss of two of his friends in as many days, set out for Yorktown. Erskine's spirit rolled in its grave tormented by the fact that his death was troubling Washington at so critical a time in the nation's history. Even before his burial rites had been completed, Erskine's ghost set off to comfort Washington. Unfortunately, the ghost never found Washington and has been accused of ransacking the neighborhood on various occasions.

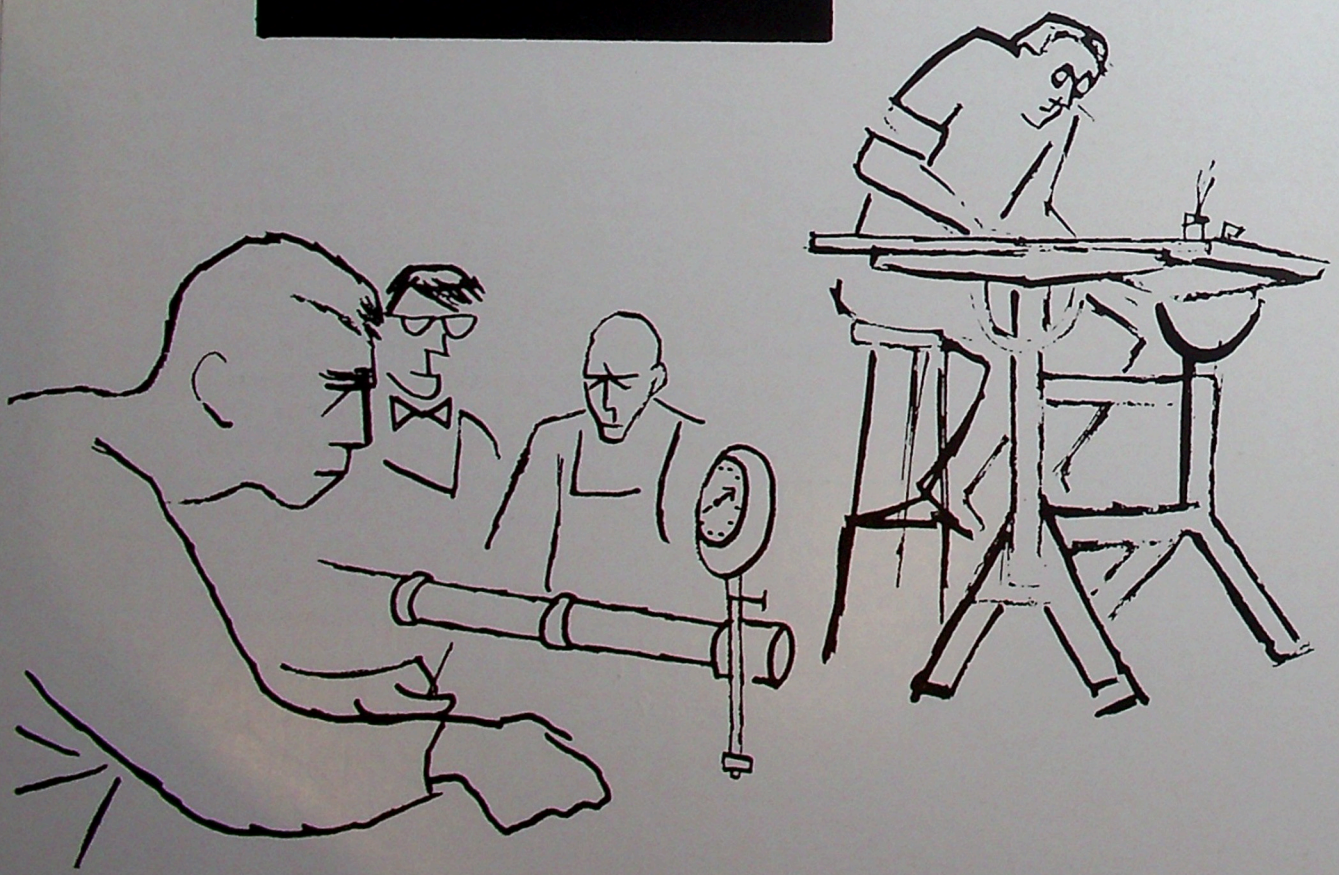
As the sketches on these pages indicate, the ghosts have been replaced by hordes of carefree Cooperites. Where have the ghosts gone?





SKETCHES





TO MANY an outsider, The Cooper Union presents a rather pathetic appearance. Picture if you can, a college campus in the heart of the world's busiest city surrounded by noise, confusion, tenement houses and pan-handlers. Imagine classes continually being interrupted by the agonized groans of an obsolete railway that runs by the windows. Visualize a building with windowless classrooms and this rather unimpressive sight is The Cooper Union. But this is The Cooper Union with its guard down, with its worst foot forward.

Suppose we look at this school from a slightly different point of view. Suppose we forget about the bricks and the plaster and turn our attention to the people, to the instructors and students, and artists alike.

That is just what we have tried to do in the next few pages of this book. The spotlight is on the individual. We invite you to watch him, to hear, and to meet him.

STUDENT LOUNGE
BULLETIN

It was early December in the most beautiful of all years—our Freshman year. As we stepped out of Cooper and stood in the half dark half light of the mild December sunset, we could feel the Village beckoning to us.

The first thing that caught our attention was the *Aberdeen Book Shop.* The warm light from the inside shining on the racks of magazines on the outside seemed to invite us in. T. S. Eliot's Poems were there so we klinked down 35¢ and went on our way.

Reading the *Wasteland* to each other, we entered a small restaurant on Ninth Street. "Let's take the table in the rear. After all, we're all covered with paint and it's pretty dark there." We scrambled for the seats and after removing our coats, a tall waiter approached us.

and to meet him

He seemed a little surprised at our appearance. "What would you like?" he asked in his most waiter-like tone.

"Huh? Oh, I'll have some hot vegetable soup."

"Just give me a cup of coffee."

The waiter disappeared.

We commented on how cold the weather was and stared around, taking in the surroundings. Finally, the waiter re-appeared, bearing a heavy tray.

"Look, he's got someone else's order with him, too."

"No, look, it's all for us."

While eating, we finally decided that the hot buttered rolls and cookies must come with what we had ordered. After a while, our waiter returned with the check. Before we could take a look, he said, "Don't worry girls, I understand, so I fixed everything."

"What???"

We stared hard at the check, and then at one another. The bill read—"2 cups of coffee—20¢."

It came in the evening mail—a big bulky envelope, and I opened it as fast as my fingers, trembling with excitement, could open an envelope. I held my breath until I read, "We are pleased to inform you that you have passed our entrance examination."

"Ma!"

One week later, the C.U. Bus squeaked to a stop and as I jumped out and glanced around I got my first glimpse of the Green Engineering Camp. And a glimpse was all I got. The next thing I knew we were being herded in the general direction of a large barn. This barn was, of course, no barn at all but was instead the modern Camp Green dormitory. In less than thirty minutes, I was comfortably established in my bunk watching a parade of faces. There were tall fellows, and short ones. skinny ones, and fat ones, but all wore eager, interested smiles.

As I look back now, I remember the first meal. There were eight fellows at my table, all of whom must have had some previous experience in summer camps because they really wolfed that first bowl of mashed potatoes.

During that camp session there was a great deal of talk about the mountains of work ahead of us, but we laughed these stories off as rumors. We were too young to know.

A visitor admired the view of the gray Bowery section out of the sixth floor window. The Third Avenue elevator wound its way into the heart of the Bowery and the back of Peter Cooper's statue seemed to shield the unsightly scene from his eyes.

Walking past the lockers, he saw the Fine Arts students slowly emerge from the haze of pigment dust and the air cleared. He noticed that the model was getting used to the fact that she did not really look like she had always imagined. Maybe she *was* green and shaped like a triangle. "Oh well, Art for Art's sake!" In one corner, the mysterious symbols "M" and "F" rested securely on a crowded stuffed locker. Everyone was used to them by now.

Our visitor noticed one gratifying thing, that from all the work that he saw, it was evident that here were students who were furthering a "way of life," for Art is not merely a Profession, but a way of thinking and living. He was a little puzzled however, and went down to the library and asked a librarian for a book on modern art. He was handed "The Dehumanization of Art" by Ortega y Gasset and he read it. Then he went upstairs again, where he gazed a long, long, time at the students, returned downstairs, read the book a little slower, and then went home.

They come in from the fields, they rise from their drawing boards, they leave the factories, they finish their sales talks and they travel to Astor Place. Kids of eighteen and mature men of thirty are banded together in a fellowship of too little time and too much to do. Amid the clatter and clang, the hustle and bustle of city life, they rush from home to the job, from the job to the school, and from the school back home. Their life together is crammed into twelve short hours a week. And in that space of twelve times sixty minutes they must bite off, chew and assimilate an education.

They gather together in their favorite eating places along the Bowery, on 14th Street, or Third Avenue.

"Hi John. Who has today's Math homework? Oh hello Ed, didn't see you come in. How do you get e to the x on a slide rule? Well you . . . One salami and eggs! Then you read it on the D scale. How do you get the gram equivalent weight of sulfur trioxide in the Chamber Process? First you . . . What! No more mustard? Get it? No! Well copy it. What a place—no mustard. Did you see Sam's wife? Who has my slide rule? Say gang it's seven. Mike $.45 out!" and so forth into the Hewitt Building.

"I don't understand article 125. zzz. Well, what is troubling you? zzz. The beautiful dark woman with the long soft curls skipped lightly out of the picture frame. We have reason to suspect that the first n terms of Taylor's series (a polynomial of degree n-1 in x-a) for an approximation. She danced around the purple hall and slid on a rainbow past a waterfall. We wish to find the properties of the remainder R(x, a). Then she landed in my arms and spoke no word at all. Hm! Let me see. She moved closer. No, not that way. Like a little gazelle. This way. Bong! There's the bell. Do problems 1a and d, 5a, b, c, d, e, and f. We'll continue next time."

Last Tuesday night things got as bad as they could get. I had just finished tacking a half finished drawing to the top of a bridge table when I discovered that the edge of the table was not square. I proceeded to plane one edge and at the end of an hour only a narrow sliver remained, but it was square!

Once again, I tacked the drawing to the table. The quiet of the room was shattered by the sound of the door bell. The family police dog leaped up, and hurled his ponderous weight against the table leg and I gritted my teeth as I watched the black India Ink flow slowly across my plate.

When quiet was restored, I tacked down a new piece of drawing paper. Two lines later the radio blared, "Good morning, it is now Wednesday, and here is the morning news."

"But it's Tuesday," I yelled, "It's Tuesday!"

There is a group sitting at a restaurant table in a place just off the "campus"—Cooperites relaxing. They talk about homework and special problems; they gripe about text books and tests and teachers and jobs and things in general. The door opens and a tall, thin, worn looking fellow walks in, orders a cup of coffee and approaches the text book, slide rule, paper littered table. Everyone greets him. The fellows like Warren; he has an even temperament and common sense which commands respect. He pushes aside a Mechanics text and sets his coffee down. Ben glances at his watch and says, "You better hurry! It's almost time!" Warren looks up and he talks fast. "I'm not going. I just talked to the Dean and got a leave of absence. There is sickness at home and I just can't keep up." Everyone is silent. Then Charlie says, "You lucky stiff, now you can start living again. You can catch up on your sleep and forget about books for a year." They all put on their coats, tell Warren they hope things get better at home, to have a nice vacation, and to be sure to come back next year. Then they leave. Warren sits at the table and finishes his coffee alone. There are no more text books or slide rules. The table is bare and empty like all the others. It seems out of proportion with the small empty coffee cup on it. He rises, pays his bill and walks slowly out the door—a man with a nice long vacation before him!

An empty lounge—silence.

The shorter hand of the clock points toward the three as the longer hand moves slowly, inch by inch toward the center of the twelve. Even now two fellows stroll in chatting quietly. Another minute more and a crowd of laughing, tired students troop in and hastily find themselves a place to sit. For it is three o'clock and this is the fifteen minute break. Listen and you can hear them "talking shop":

"Wonder how late I'll have to work to finish those plates tonight?"

"I hope I can stretch this five dollars until I get that next check. I could eat less and study more."

A steady stream of chatter and occasional girlish laughter is heard. Everyone seems to appreciate these fifteen short minutes. A bell rings. A few fellows quickly take that last drag, then hurry back to class.

An empty lounge, silence.

Engineer, an engineer! Wanted ten words on an engineer!

After having passed the entrance examinations, I prepared to take old C.U. by storm. Gangway peasants for here I come—Rembrandt, Picasso and Delacroix all rolled into one—God's gift to the intellectual world. With my first homework assignment proudly tucked under my arm I entered dear old C.U., conspicuously put out a half smoked cigarette and rode up the elevator. Strutting into the classroom, I pinned the assignment on the wall, and waited for those lovely compliments.

One minute, two minutes, three minutes passed and I heard nothing but idle chatter. Then the instructor entered the room and I could tell by the look on his face he had seen my drawing. He put on his glasses, and looked again, and loudly said, "An abortion."

Before he could ask who did it, I ran into the ladies room to hide my tears. I dried them quickly for, after all, most great artists are not appreciated in their time anyway.

Two large drums were on the floor in front of us. We sat with legs crossed on a pillow. Others came in, one, two, and in ones and twos filling the spaces between and around. A Haitian boy touched a drum (boom boom boom) and we listened. A Haitian with red hair touched the second drum "Simba, Simba." Heads and feet and hands and voices in rhythm. The beat was faster now (baraumboom) and faces were closer. And dust rose to (boom).

The Jungle was left behind and we entered the world of syllables—EE, OO OO, B Bop. Faces swayed red, yellow, dark and smiled to the beat—and we all clapped hands. And every one was in his world. Sincere?

I never remembered seeing the crowd looking as gay maybe with the exception of when the year began in September. Joe gave the signal and we formed a conga line to the I.R.T.

Many engineers spend all their time doing reports and give up all sorts of recreational activities. But not Sol. He went to Camp Green, report or no report!

Foolishly he thought he could finish the job at camp but before he knew it the trip was over and Norm was offering him a ride home by car. Sol was so happy to get the ride that he forgot his books. Just before arriving in New York he realized it. Not being lazy he went straight home, jumped into his car, drove back to Green, picked up his report and returned home in time to see the sun rise.

He was missed by many people on Monday and what he did that day is still a mystery. But on Tuesday Sol appeared with the finished report.

The Architect pored o'er his drawing board,
One sultry summer day,
And his troubles brewed, as his pencil he chewed,
And his thoughts seemed far away.

Now this Architect man had agreed to plan
A sweet little cot by the sea,
For a friendly client, easy and pliant,
Who promised a good fat fee.

He said, "Build it for two, I leave it to you
But my wife will be here in a minute
Take her advice, but look out for the price,
And keep it within the limit."

His wife was smart, she had studied Art,
And all things artistic admired;
So a sweet little cot on a shady green plot,
Was just what she had most desired.

She said, "Make it unique, exhibit technique,
Somewhat in style Renaissance;
And then the theme of the coloring scheme
May be something of dear sunny France.

On the very first floor, near the front door
My studio will have to be;
And I will love it, with a window above it,
So the light may fall on me.

Then she sprung new surprises and gave all the sizes
Of music room, boudoir and all
And in all the space she had left no place
For either a kitchen or hall.

The Architect pored o'er his drawing board,
One sultry summer day,
And his troubles brewed, as his pencil he chewed,
And his thoughts seemed far away.

Some poet once said . . . What was it he said? That's queer. I can't remember. But whatever it was it sure was true. Take for example that little adventure last week. I mean the one that took place on the Columbus Circle station of the Independent subway. I was standing alone on the platform. When I say alone I mean that I was not acquainted with any of the 15,000 odd people crowded onto that same platform. I was having a rather difficult time balancing all of my equipment. In my right hand I was carrying a green metal box of art supplies. Under my left arm I carried my drawing board and T-square and under my right arm was a mailing tube which contained my latest creative efforts. The most annoying feature about this situation was the fact that my nose itched. I tried rubbing it against my shoulder but the resulting sensation was wholly unsatisfactory. Finally, in desperation, I reached up to scratch it and lost my grip on the mailing tube. It bounced once on the platform then dropped to the tracks below. There was a rush of air, a terrible roar and the Bronx Express came rolling into the station heedless of my anguished moans.

A minute later I was hurrying to the end of the platform trying to find someone who would help me retrieve my lost treasure. As luck would have it I could find no one. When I returned to the scene of my misfortune the mailing tube was settling slowly in the muddy water that runs between the tracks. I turned and slowly walked away. It was too late. The world will never know the beauty of those paintings. Now I remember what that poet said.

"Perhaps in this neglected spot is laid Some heart once pregnant with celestial fire; Hands, that the rod of empire might have sway'd, Or waked to ecstacy the living lyre."

"Zoppo." The instructor's voice rang out. "Which one of you fellows is Zoppo?" No one moved. The instructor glanced at the pile of blue cards that had just been filled out. He had made no mistake. The name on the top card was Joseph Zoppo. When he looked up and noticed the smiles spreading across the faces of several of the students, Zoppo's card was immediately torn up.

However, this little incident was not the end of Zoppo, the incorporeal Civil Engineer. On the contrary, this incident marked the beginning of a tradition that has lasted four years. Along with his imaginary chum, Rodney Dangerfield, he has voted in every poll and election, registered for every class, applied for every camp or field trip, and in general, participated in every function that was open to his mortal companions.

But after the coming graduation Joe and Rodney will haunt the Cooper Union's halls no more. After graduation, they will in truth be engineers in spirit.

There were two floors to Joe's house and both were filled with clinking glasses and wagging tongues. By the time I finished touring the house I was at home in the dandiest party of the year.

Downstairs a big turbine was operating and the motor kept a pounding beat. Everyone was doing a square dance. I entered the Virginia Reel and everyone took turns reeling. Some dropped to the floor and others into couches and in marathon fashion, ended the reel. The music on the radio kept the turbine working in true Gene Krupa style.

Two hours later somebody found the missing barrel of beer and rolled it into the center of the room. From nowhere a chorus of forty voices rose to the "Whiffen-poof" song and the last thing I remember was chug-a-lugging a mug served to me by a goddess with silver wings.

2X2=4

Calendar
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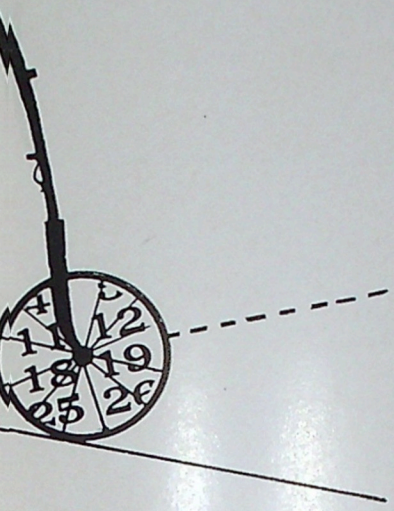
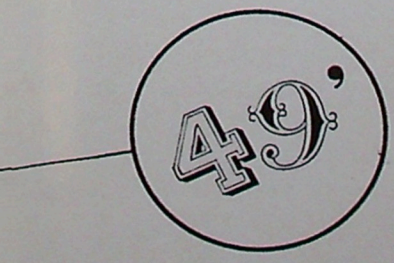


TO THE DISINTERESTED READER, the following section of the Cable may appear to be a simple calendar of the main events of the school year. But to us, the Cooperites who have lived this calendar, it will serve as an irreplaceable album of cherished memories. To some of us it brings back scenes of week-ends at Camp Green. Others of us will relive those thrill-packed minutes of the Brooklyn Poly game. And still others will recall the long-awaited house warming of the Rifle Club's cabin.

It is with this thought in mind, that we present this calendar. We hope it will help you to recapture those memorable moments of the past year.



Just back from their summer vacations, eager engineering students mob Josephine for their new programs.

Sept. 15 The sun shone on Peter Cooper's statue and on the lazy scene about him. Only an occasional squeak from the Third Avenue El disturbed the serenity below.

Then, on the unusually warm morning of September 15, a gradual rumble issued from the Sixth Avenue subway, the I.R.T. and the B.M.T. and made its way toward Cooper Square. What a glorious sight—eager Cooperites on their way to registration!

This year's group was a most unusual crew, bringing tales of Colorado, Washington, the Catskills, Provincetown and countless other places. From the sound of these yarns, we could look forward to an eventful year.

Dancing in main lounge at Green Engineering Camp on the evening of the A.A. Picnic.

Oct. 17 At 9:00 A.M. in the morning last fall, three bus loads of colorfully clad Cooperites and their dates set out for The Green Engineering Camp. For the next hour and a half the usually quiet countryside of New Jersey echoed and re-echoed with the singing and noisy laughter of this "Cooper Crew."

When the buses arrived at camp, the fellows and gals swarmed over the camp grounds. For the remainder of the day they could be seen chasing basketballs, footballs, baseballs and one another. After dark, faculty and students alike retreated to the main lounge, where the singing and dancing to the music of a very tired phonograph continued until 10:00 P.M.

Enveloped in darkness, the tired, weary group rolled silently and swiftly home.

Cooper's yachtmen in the lead rounding the windward mark in the Kings Point Regatta.

Bob Sheridan addressing a group of art and engineering freshmen at the Freshmen Tea.

Oct. 23 We came in second that day which wasn't bad. After all, beating three out of four schools gave us a 0.750 average.

But let's start at the start, and get squared away. This is the story of the Second Annual Greater New York Dinghy Championship, big race of the year for the Cooper Union Yacht Club. Webb, Stevens, Fort Schuyler, and King's Point were our opponents.

After the five Cooper sailors, and incidentally a few other contestants, arrived at King's Point, the regatta got under way. When the final tally was taken, Cooper's men came through with 41 points for the school. But it just happened that King's Point's crews managed to get 55. The sought-after trophy now rests at King's Point Academy, but we hope to remove it shortly and bring it home to Cooper Square.

Oct. 31 The Annual Freshman Tea took place during the Hallowe'en weekend. The Cooper Union Women's Club, headed by Mrs. Frederic H. Miller, provided cookies, candies, tea and coffee. Dance music was supplied by members of the Day Dance Club and a short skit on the trials of a *Pioneer* reporter was presented by Jack Friedman and Bill Warshofsky.

Most of the conversation of the day was concerned with non-scholastic topics, but one evening school senior was trying to convince a day school freshman of the foolishness of his choice, namely, a self-inflicted four year social excommunication. But the smiling newcomer turned a deaf ear. We have no doubts, however, that the recipient of that good advice will be expounding similar views to some freshman at next year's tea.

(above) *Bob Sheridan congratulating Irv Rosner on the success of the AP.*

(center) *Eli A. Rubin taking the four tickets that clinched the Cable drive from Joe Deare, Circulation Manager. H & H look happily on.*

(below) *Drinking pop in the splash party marathon.*

Nov. 5 In mid-October, the future of the A.P. looked dark and dismal. However, thanks to a few energetic students who relentlessly crusaded for A.P., the student council voted to extend the membership drive for another three weeks.

With this new lease on life, Irv Rosner, chairman of the A.P. committee, and Herb Wagner, A.P. treasurer, swung into action. The first step was a revision of the A.P. budget. By dint of much coaxing and a little arm twisting, the committee managed to separate enough Cooperites from their $4.60 to continue Cooper's extra-curricular life.

Nov. 13 For the first time in years, the cost of the Cable was not included in the A.P. dues. Thus it became necessary for the Cable to sell itself. On October 15, the future looked even blacker for the Cable than it did for the A.P. To cope with this situation the post of Circulation Editor was created by Eli Rubin and Joseph Deare was appointed to the job. By combining the pleasant smile and ready wit of Joe Deare with the brute strength of Ed Gregg and the persistence of Irv Hammer, enough hesitant Cooperites were finally roped in to assure payment of the printing costs.

Nov. 23 One way of filling up any swimming area is to exhibit bathing beauties. In Cooper such exhibitions are unnecessary to fill up the Church of All Nations pool for a Splash Party. Even Bruno, the sport, admits that he had never witnessed such a mad array of races, skits, and demonstrations as he saw during the ever-popular Co-ed Splash Parties. Cooper's Life Guard instructors and organizers of the Splash Parties, Arnold Tepfer and Joseph Turtil, encountered some unusual difficulties while demonstrating the Oriental way of Life Saving.

The engineers felt that the Splash Party Cup should not have been awarded to the artists. They considered the acts of sabotage committed against them very unjust. Their protests, we might add, availed them nothing.

Nov. 27 Led by veterans Captain Walt Nazarewicz, Gil Marin, Fred O'Driscoll, Eddie Hilzinger, and Fred Horn and supported by two promising Freshman basketeers, Harold "Cowboy Foo" Farrington and George Tishkewitz, Cooper Union opened the 1948-49 season against Brooklyn Polytech. Recalling last year's 35-point beating at the hands of the Brooklyn quintet, the "Pioneers" went all out to reverse the decision this year—and almost did.

The first half was a see-saw affair—neither team managing to lead by more than four points at any time. The combination of Farrington's drive-ins and Nazarewicz's set shooting enabled Cooper to keep apace of the Techmen. This duet accounted for 20 of Cooper Union's 29 first-half points. The Techmen, however, netted 30 to lead by one point at half-time.

Cooper quickly tied the game to start the second half—but again neither team could put enough pressure on to break open the game. However in the final five minutes Cooper's team, handicapped by a height disadvantage, and tiring under the gruelling pressure, saw Poly gradually widen its lead and win the game, 66-58.

Cooper on the defense playing zone at the Poly game.

(above) *The fabulous rifle club cabin at Camp Green.*

(above center) *Irv Karsh* (standing) *shown urging the seniors to assassinate Eli A. Rubin, the editor of the yearbook* (shown cowering in the lower right hand corner).

(below center) *Joan Annapolen and Bernie Rothzeid in a scene from "A Man Who Married a Dumb Wife."*

(below) *Champion ASCE volleyball team with their cheerleader, Ruthie,* shown left of center.

Dec. 7 The big event of the year for the Rifle Club was the cabin housewarming that took place on December 4th. The housewarming was preceded by a venison dinner that was held in the main lounge at Camp Green. The venison was supplied by Mr. Harry S. West.

Following the dinner everyone retired to the cabin, where Doctor Burdell made a short speech congratulating the Club members on their achievement. Professor Eastham then told one of his "Herby" stories after which the Club members spent the rest of the evening singing and making scientific studies of the inebriation factor of a certain organic chemical compound that is sometimes used as a catalytic agent at various social functions.

Dec. 14 Who said that Cooperman have no spirit? It became evident this past year that the only reason this malicious rumor was making the rounds was the fact that the proper channels for expression had not been opened.

On Tuesday, December 14, Cooper's senior class exhibited as much spirit as the Cadets at an Army-Notre Dame football game. The occasion? It seems the seniors wanted to lynch the editor of the year book.

Led by Dave Young, ex-financial expert of the Pioneer, the Day Engineering Seniors stormed into 203F. Here, amid the bloodthirsty cheers of the crowd, Dave presented a protest against the $1.50 sitting fee for senior pictures. This was followed by Henry Schwartzberg's presentation of Myron Manes' dissertation on the financial operations of the Cable, while the crowd continuously jeered and shouted. Next came a heated debate by experts on economics, morals and child psychology. After the close of this session, though many seniors still believed that Cable Editors were emissaries of Beelzebub, they put on their best faces, and are now recorded for posterity in the graduate section.

Dec. 16 Before one of the largest crowds ever to view a Dramatic Club production, estimated at over one thousand people, the Cooper Union dramatis personae took two out of three rounds of its bout with the Muse on the eighteenth of December, 1948, at the Great Hall. Two of the three one-act plays made a very favorable impression on the audience. The third play, entitled "Santa Claus," by E. E. Cummings, evoked some caustic criticism from one Mr. Sol Brody, Drama Critic of the *Pioneer*.

The first play presented, "The Man Who Married a Dumb Wife," by Anatole France, was played largely for laughs. The success of this effort was attributed mainly to Norman Shapiro, pompous but precious, and Jack Friedman, who chased the maidservants with a knowing and rakish style.

The most successful of the three plays was Alice Gerstenberg's, "Illuminati In Drama Libris." This satire on the immortal boy meets girl situation was gracefully enacted by Abe Charlip and Lilly Benedict.

Dec. 18 For three consecutive years the present 4DCE class entered a team in the intramural volley ball tournament and each time the club brought home the championship. The team was solidly constructed around its three tallest men, Gil Marin, Sam Erde and Logan Ingram. But volley ball is a team game and these big men depended on the shorter men like Ted Aster, Don Chilton, Eli Rubin and Bob Warshaw to set the ball up at the net.

Only once in the past three years did the Civil Engineers lose a match. On this occasion Gil Marin and Logan Ingram were not playing. With their mainstays missing, the remainder of the team was sorely pressed and although they fought valiantly to maintain their prestige, they finally succumbed. The second time they played the same team, however, the story was quite different. The Civil Engineers bounced back to avenge their only loss and set a Cooper Union Record for winning the most consecutive championships.

(above) *A group of students singing at the fabulous ASME Dinner.*

(below) *Professor Hope leading a discussion on co-ed weekends at Camp Green.*

Dec. 25 For the twenty-fifth year, the mechanical engineering students, alumni, and faculty met for an evening of social and professional enjoyment.

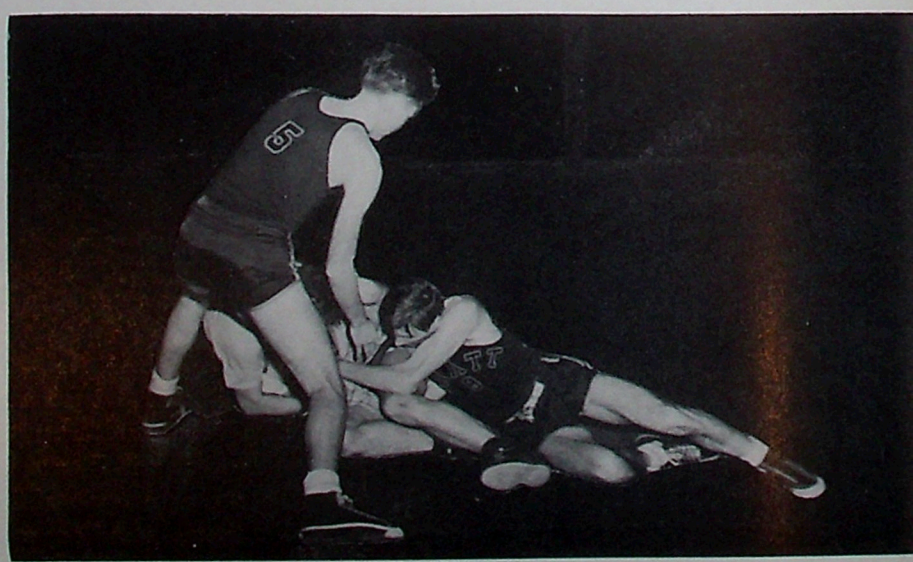
The guest speaker, Johnson E. Fairchild, Head of the Division of Social Philosophy, started the evening off right by recalling the summer when he almost married an Indian chief's daughter. The evening passed rapidly and reached a climax when the A.S.M.E. Santa Claus presented Prof. Merritt with gigantic two- and three-dimensional "potatoes."

Proceeds of the affair were used to buy a bookcase for the books left to the school by the late Dean Bateman, the originator of the Christmas dinners.

Dec. 26 The taboo on co-ed week-ends at Green was lifted by Prof. J. M. Peterson and a cold Pioneer tribe, pledged to good taste and propriety, camped on the banks of the Ringwood River to test their tribal vows.

Two feet of fresh snow greeted the toboggan-happy braves and squaws. Merrily they pussyfooted their way to the top of North Base and took the dangerous toboggan trail to the west. At the end of the sun and snow-filled days, the fireplace provided an ideal place for thawing out. It was just like in the good old days, except for the twelve inch rulers that a busy group of gremlins were hopping around with to measure distances between the braves and squaws.

The presence of Mr. Hebald and family rounded out the group. Mr. Hebald led the way in snowman building and in Gilbert & Sullivan singing, while Mrs. Hebald's fine cooking and attention endeared her to the group.



Nazarewicz fighting two Pratt men for the ball.

Student Body turns out en masse to cast ballots on the new constitution.

Jan. 8 That day Cooper Union faced Pratt Institute in the Stuyvesant gym. The small but speedy Pratt team quickly spurted to an 18-8 first quarter lead. But the "maroon and gold" quintet gamely fought back. Spurred by Farrington's seven points, the Cooperman cut the Pratt lead during the second quarter to seven points.

A zone defense—initiated by the Cooperites—opened the second half, but Pratt's capable set-shooters Dobson, Kunstler and Horn easily nullified that strategy. Before the third quarter ended, the Pratt quintet had broken the game wide open with a seventeen point barrage and led 56-30. The Pratt hoopmen proved a little too experienced and fast for the Coopermen, finally winning 74-56. High scoring honors went to a Cooper man, however, as "Cowboy Foo" Farrington scored eighteen while Pratt's high men were Dobson and Kunstler with seventeen apiece.

Feb. 10. For many years the Student Council has felt a need for a formal constitution which would clearly define its powers and limitations. The existence of such a document would remove the possibility of having hours of research and discussion in the Council overruled by the administration.

Recently, under the leadership of Council president Robert Sheridan, a formal constitution was drawn up after many debates on numerous major and minor issues. During the first week of February the constitution was ratified by a majority of the student body. Before the constitution goes into effect, however, it must still be ratified by the Board of Trustees.

Feb. 10. Once again the ODP Maroons swept the Intramural Bowling World to make it the third consecutive year that the fraters have won the bowling trophy. If they repeat their victory next year, they will gain permanent possession of the trophy. Close behind in the field of sixteen were the 4DCE, SKT(B) and LSK teams. Aside from team honors there were three individual awards. A. Benton won the medal for the highest game of the tournament; Hank Hirsch received the award for the highest daily set and Joe Deare for the highest daily average. Pete Zachman, manager, and Don Bass, asst. manager, deserve considerable credit for the smooth scheduling of the events.

Feb. 11. A new three year contract for senior jewelry was obtained by George Kaufman from the G. and D. Company. The new contract featured a change in the official jewelry. The standard graduation ring now consists of a synthetic ruby, with the year of graduation, a picture of Peter Cooper, and a view of the Foundation Building on the band. The Key will have the words "Art" or "Engineering" engraved on it. For a picture of the ring, see the middle photo below.

Feb. 12. Peter Cooper's one hundred fortieth birthday on Saturday, February 12, was celebrated by a day of ceremony and dining.

A delegation representing the Alumni Association travelled uptown Saturday morning to New York University's Hall of Fame on its University Heights Campus in order to lay a wreath at the bust of the Founder. After a brief, solemn, ceremony, the group entrained to pay a visit to his statue on Cooper Square. Charles Tilgner, GS '91, one of the oldest living Cooper graduates, placed a wreath before the statue with the aid of Mr. Goldsmith, president of the Alumni Association.

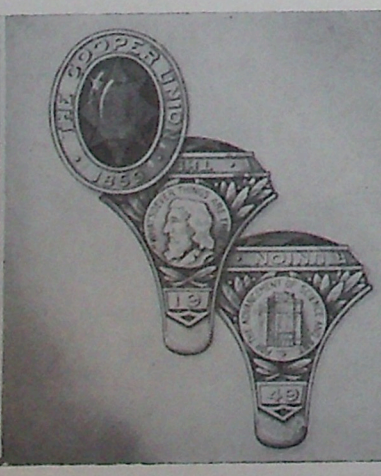
That evening, in the Blue Room of the stately Hotel New Yorker, nearly 600 people attended the Annual Dinner-Dance which is traditionally a means of paying homage to the late, great "mechanic of New York."

The celebrants were addressed by Gano Dunn, President of the Board of Trustees of The Cooper Union, Dean Norman L. Towle, of the Engineering School, and Mr. Fredericks H. Zurmuhlen, Commissioner of Public Works of the City of New York. Mr. Edward R. Hewitt, grandson of the Founder, recalled some humorous anecdotes concerning his grandfather.

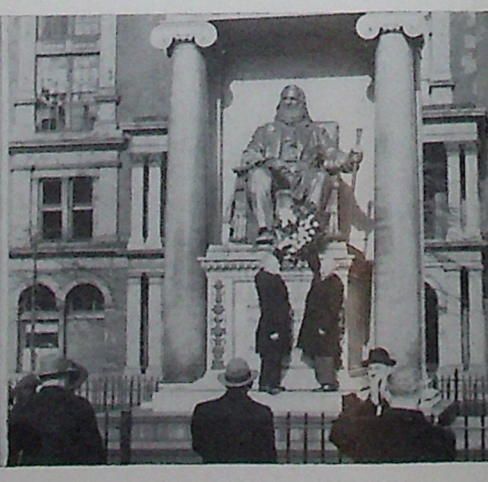
The evening was rounded out by dancing to the music supplied by the Jerry Malcolm Orchestra.

ODP bowling team surrounding coveted intramural trophy which they have won for the third successive year.

The new senior ring.

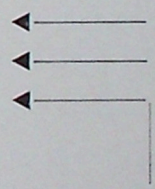


Placing the wreath on Peter Cooper's statue on Founder's Day.



Feb. 17 In the first match of the season and the baptism of fire for eight of the nine man squad, the fencing team lost to Pace, on Feb. 19, by a score of 18 to 9. The experienced Pace aggregation was just too much for Cooper. Cooper's star swordsmen were Arnie Olsen, our big saberman, who took all three of his bouts, and Dave Wassertheil, our epee-curean, who captured two out of three. With the initial jitters of the first combat gone but not forgotten, there is definite promise that the team will fight its way into the winning column by the end of the season and will make a habit of it next year.

The grant of $100 recently acquired from the Alumni Association has permitted the club to cope with its increasing membership through the purchase of new equipment and the repair of old. There is little doubt that skill is lacking, but the enthusiasm of the fencers, as evidenced by the rapid depreciation of uniforms and the breakage of blades, is the most prominent, gratifying, and expensive feature of this year's squad. It is sincerely hoped that within a very short time this display of power will be wrecking havoc upon opponents rather than weapons.



Ernie Nussbaum and Harvey Cohen warming up before the Pace Match.

Feb. 18 Before an enthusiastic capacity crowd in the Great Hall, Mr. Harry Holtzman and the Dunham Experimental Group weaved their way through a program of traditional Caribbean dances. The group, consisting of eleven dancers and three drummers, performed a series of basic movements and then combined them in a number of exotic dance patterns to illustrate their flexibility. The desire of the group is to be as authentic as possible, but several movements had to be changed to avoid censorship. Among the dancers in the recital were Louise Fitzpatrick, who appeared in "Showboat," and Leo Colman, the deaf mute in the recent production of Carlo Mennoti's "The Medium."

The chief complaint regarding the price of an A.P. card was—"It don't supply no women." However, our double negative critic reckoned without the Committee and Hunter. Seems the A.P. powers persuaded Hunter's dean that 125 Cooperites could be trusted, for four hours, at least, at Hunter's Roosevelt House on March 11th. Bet your life they could be trusted, and plenty of armed Hunter faculty acted as trustees . . . . still, everyone was looking forward to more such affairs.

Scene from the Hunter Scandals at Roosevelt House.

Moving uptown from the Bowery to the Belmont Plaza, the seniors escorted their dates to the Moderne Room for the 1949 Senior Prom. Upon entering the luxurious ballroom the couples were greeted by a magnificent array of whirling gowns. Dancing to music provided by Ralph Hayes and his NBC recording orchestra, and imbibing spirits provided by Calverts, the seniors spent an evening they will long remember.

The principle driving force and arm twister behind this year's Senior Prom was the distinguished Norman Sacks. Though there were times when the feat seemed neither feasible nor probable, the committee persevered to make this one of the highlights of the senior social calendar.

On April 30, Cooper Union's thwarted musical-comedians presented their annual edition of Class Night. Fred Dolgon, Jack Friedman, Lenny Slonevsky and Co. put on a bang-up production based on this year being the ninetieth anniversary of the founding of Cooper Union. The theme of this integrated farce was an investigation to determine whether C. U. has justified its existence as an institution of culture and learning by citing contributions to progress made by the school, its students and faculty.

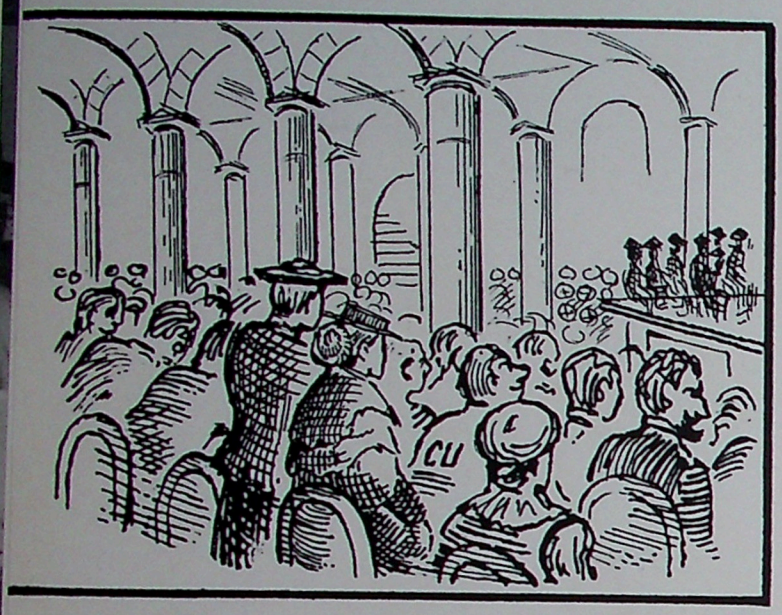
The turnout was surprising and the audience enjoyed itself almost as much as the performers. This year Prof. Fairchild made the customary Class Night address, and then presented the Gold and Silver C's to the students who had earned them.

On the 14th of May 1949 there was a pilgrimage of Cooper students to the New York City Center Casino for the Annual Dance, one of the many benefits afforded to AP members. Grabbing for a member of the opposite sex, the engineers and artists made a night of it, dancing to the music of Ralph Hayes and his orchestra, of NBC recording fame.

But all was not play, for a great deal of behind the scenes work was necessary to insure the success of the Dance. The committee was headed by Frank Kovacich, with Prof. J. C. Hollinger overseeing all its efforts. It is to this committee that we are indebted for the swell time we had.

Joining the back to nature movement the senior class went on a picnic. Forsaking their slip-sticks and paint brushes the Cooper students corralled their dates and went out into the alien sunlight to commune with the birds and the bees. Lolling around on the green grass beneath the clear blue sky and shooting the breeze about their past school hardships and future careers, provided a welcome change from curricula burden.

The last social event in which the members of the graduating class participated before they left the hallowed halls of The Cooper Union, the picnic was enjoyed by all who attended.



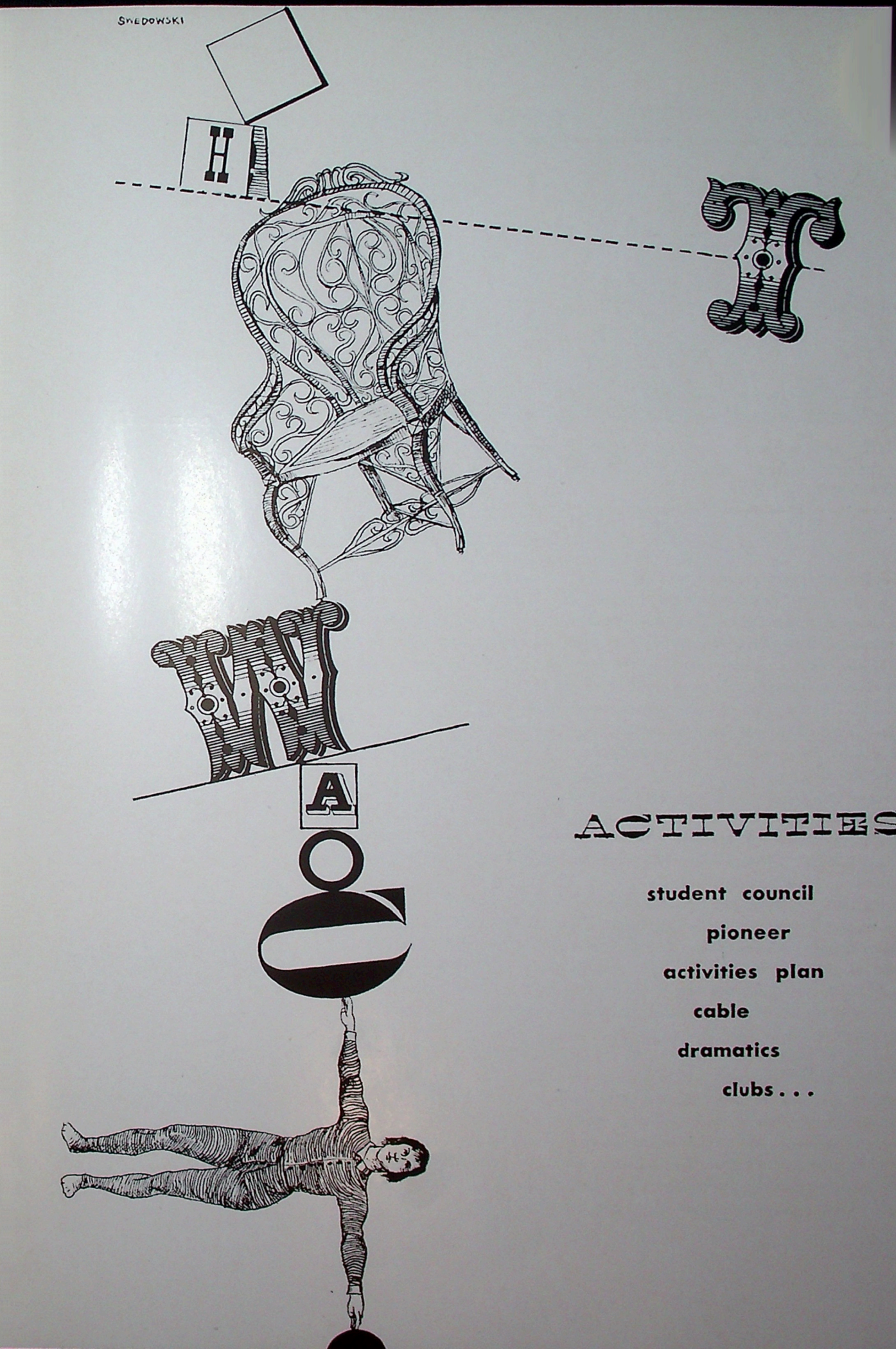
and so ends the school year

The pages of our calendar close, as they do every year, with June, the month of graduation. To most members of the Cooper community June means the end of another school year and another three month vacation to do as they please before returning to the everyday routine of school life. But to the seniors it means much more than that. It marks the climax of their school careers. It is the culmination of many years of hard work.

However the hard work will soon be forgotten, and the memory of it will be replaced by thoughts of friends, of instructors, of snacks at the Sagamore or Adler's, and of bull-sessions before, between and during classes.

Graduation marks a personal triumph for all, but particularly for the evening school graduates. These night artists and engineers not only held down full time jobs by day and went to school in the evening, but they also found time to eat, sleep and do homework; and in addition, many of them managed to maintain a home and raise families.

From three to fourteen years, with service interruptions for many, have been spent completing the required work, but the joy upon graduation is actually the joy of finally attaining the goal of years of effort, and not that of being glad to leave Cooper and transforming both the good and hard times into fond memories.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ACTIVITIES
student council
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dramatics
clubs . . .

The great achievement of the 1948-49 Cooper Union Student Council was the new Student Constitution, which was overwhelmingly approved by the Student Body.

At this writing, this unique document of student government needs only the Director's approval before being presented to the trustees for final consideration. In view of the generous encouragement with which Dr. Burdell guided the arduous labors of the Council, it is expected that he will soon put his official seal of approval on this result of their efforts.

A constitution embodying liberal student powers, officially approved by the Board of Trustees, had been the longtime dream of Student Government in the Cooper Union, even as it is the expressed desire in Peter Cooper's famous letter accompanying the Deed of Trust of the Cooper Union.

Previous Councils had attempted unsuccessfully to fullfil this ambition, but it remained for the present Council, under the unrelenting leadership of Robert Sheridan, to bring this dream to its present state of realization.

Yet, despite the monumental work required by the drafting and ratification of the new constitution, another signal achievement requires specific mention. This was the uniting into a single body, of the Day and Night School Councils. Split previously by the exigencies of the Great War, this unified Student Council was able to go about its work with increased efficiency and spirit.

In addition to these two outstanding achievements, other good works such as the standardization of the Senior Ring, the re-institution of co-ed week-end trips to Camp Green and the formation of a Student Camp Committee to supervise these week-ends, cannot escape salutary mention.

Of course, there were also the regular activities of the School which were pushed with unusual and commendable energy by the Council's all-embracing Activities Plan Committee.

Late in February, with most of the Council's great work behind it, Bob Sheridan felt that he finally could rest from the heavy duties of Council Chairman. It was with regret tempered by appreciation of his great services and capable leadership that the Council accepted his resignation.

John Nolan was elected to succeed him and guided the Council to the end of its great year of achievement. On April 18, the Council stepped down and the newly elected Council of 49-50 looked ahead to a future, which would bear the guiding impress of the Council of 1948-49.

This year's Activities Plan drive for membership, like many of the previous drives, ended in a hectic last minute attempt to get 200 more members. Appealing to the good citizenship of the students, Irv Rosner and Herb Wagner did what seemed to be impossible. The A.P. was saved, the *Pioneer* could go to press, and there would be an Annual Dance.

But while the drive was at its height, other members of the committee were busy trying to save money for A.P. members. Julie Spector and Saul Davidson, inaugurating a new form of reductions, announced that reductions to operas at the City Center, as well as to several foreign film houses, were available to A.P. members. Irwin Rosenhouse soon obtained reductions to the Hyams-Greene theatres and later in November, reductions to several Broadway shows were obtained.

It soon became evident to members of A.P. that the committee could accomplish a great deal if it had student support and student interest. The A.P. could become more than a symbol of money-gouging, which many people seemed to think it was. It could be an activity-promoting organization, giving the needed drive to acitvities without as well as within the school.

Working on a reduced budget, the A.P. committee itself could do little but promote activity. However, it took the initiative and sponsored a dance after the Dramatic Club performance at Christmas time.

In March, another innovation was introduced by the A.P. committee when 150 Cooper men were the guests of 150 women of Hunter College. In conjunction with the Central House Plan of Hunter, plans for the gala event were started way back in December, Jack Friedman being the chief Cooper Union planner. At least it was proven that there were many new ideas for the committee to think about, and many new things that could be done.

But in many respects this year was no different from any other year. Members were still hard to get. Money was just as hard to collect, and in spite of the fact that A.P. existed, The Cooper Union was not a beehive of activity. In the words of Irv Rosner, "The A.P. committee has spent too much time on its membership drive and in collecting money for it to concentrate on sponsoring new activities. Activities can exist only when students put time and work into sponsoring them. If you have a gripe or a constructive suggestion, your diary is not the place for it. Submit it to the A.P. committee and be willing to work on your ideas."

AP AP AP

If the curious passerby should stroll along the Bowery just two doors north of the Cooper Union Supply Store he will be rewarded by the sight of hordes of happy, carefree students busily engaged in adding more grey hairs to Mr. Thompson's already care-laden brow. When not engaged in turning in false alarms, these typical Jack and Jane Armstrongs manage to produce the Pioneer, a bi-weekly publication, which, at present writing, still retains its second class mailing privileges. True journalists all, these fledgling Hemingways consider school to be just a hobby, and devote their major efforts to grinding out deathless prose.

Co-editors Norman Perry and Joe Turtil are representative members of this big happy family. In between editorial conferences they have been known to speak civilly to each other. The irrepressible Turtil attained his high office in the middle of the year when Hank Hirsch resigned because of the pressure of outside duties. He vehemently denies the rumor that Hirsch was convinced of the wisdom of this move by the receipt of several poison pen letters, and the discovery of a pencil bomb in his brief case.

pioneer pioneer pioneer pioneer

It would be futile to attempt to record all the members of this exclusive group, for the list of names would nearly fill the pages of an entire police blotter. Some of the more decorative initiates can be mentioned; sweet Lois Swirnoff, the Lucretia Borgia of the Sixth Floor; shy, simple, unaffected Eleanore Cohen; capable Leila Press, and star reporter Joyce Levine.

The Pioneer has its own old age problem, too. The office is infested with swarms of editors emeritus. Too young to collect their social security pensions, and considering work beneath their dignity, these discarded human wrecks spend their time around headquarters, cadging cigarettes from the more efficient denizens, and keeping a sharp eye out for the parole officer. Among the recognizable specimens are Don Weinblatt, Sam Starr, Jay Goldin, the aforementioned Hirsch, and Walter Landauer.

cable cable cable cable

Back in September when it was first made known that Jonas Harrison, the would-be Editor-in-Chief of the 1948-1949 Cable, had left school, the future looked pretty dark. But out of the ranks of Ex Post Facto rose Eli A. Rubin who ascended the throne of editorship and proceeded to make plans and create executives with a fury unequalled in the history of Cable publication.

In no time at all an elite group of nobles comprising the intellectual cream of the Cooper Union clustered around Mr. Rubin. Foremost in this powerful clique was Business Manager, Mike Manes, master of finance and of his newly acquired fiancee, Belle Marder.

The powerful triumvirate of Irv Hammer, Managing Editor; Vic Liebowitz, Art Editor; and Chris Young, Literary Editor, was the backbone of the Cable's strength until a heated rivalry arose between Chris and Vic. Vic insisted that the stories be cut to fit his layout while Chris insisted that the stories be cut out, period.

Irv Hammer, meanwhile, with the aid of Ed (The Muscle) Gregg spent his days and nights intimidating Freshmen into signing Cable pledges.

The most harried member of this year's staff was Ernie Oppenheimer, Photography Editor, who clicked his camera's shutter everywhere from Oscar's newsstand to the McBurney Y.M.C.A. in an effort to keep pace with the captions that were being written before the pictures were taken. (Such was the fury of the industry of the literary staff.)

The only married member of the Cable Clique was Bernie Hillman. As a consequence of his matrimonial experience he was of invaluable aid to the successful attainment of our goals.

Finally, there was Irv Begelman, the miracle worker who singlehandedly sold more advertising than was ever sold before.

By far the prettiest members of the staff were the typists, petite Rae Magasiner, charming Miss Gladys Torres, vivacious Josephine Dean and the popular Magdalen Ferstler.

Limitations of space make it impossible to mention everyone who contributed his time and effort to the publication of this book but their names are preserved for posterity on the following page.

cable staff cable staff

Editor-in-Chief	*Eli A. Rubin*
Business Manager	*Myron M. Manes*
Associate Editor	*Ben Luberoff*
Managing Editor	*Irv Hammer*
Art Editor	*Vic Liebowitz*
Photography Editor	*Ernie Oppenheimer*
Literary Editor	*Chris Young*
Graduate Editor	*Bernie Hillman*
Advertising Manager	*Irv Begelman*
Circulation Manager	*Joe Deare*
Office Superintendent	*Jack Friedman*
Personnel Manager	*Gladys Torres*
Editor Emeritus	*Jonas Harrison*

Literary Staff: *Leonard Belkin, Gilbert Marin, Arthur Klein, Michael Spronck, Herbert Cohen, Norman Perry, Frederick Housley, Bernard Fisher, Harold Goldseger, Elizabeth Reiman, Belle Marder, Joseph Turtil, Herbert Wagner, Arnold Tepfer, Norman Sacks, Irving Rosner, Eleanore Cohen, Benjamin Bayman, Mildred Gruber, Theodore Merkin, George Jones, Sam Starr, Clifford Temes, Robert Ohlmann, Harry Rosenberg.*

Art Staff: *Gloria Lebolt, Edwin Gregg, Helmuth Knapp, Bernard Swedowsky, Al Katz, Winnie Fitch, Leonard Weiss, John Seneres, Norman Shapiro, Maxine Gatewood, Seymour Sirota, Seymour Chwast, Jerry Vidibor, Albert Templeton, Marvin Wax, Lucy Papazian, William Farr, Lorraine Feldstein.*

Photography Staff: *Marvin Dean, Stanley Lazerus, Bernie Morgenstern.*

Secretarial Staff: *Sheldon Katz, Irving Karsh, Audrey Silbey, Rae Magasiner, Gladys Torres, Karen Steensma.*

monday tuesday wednesday thursday friday

With the return of life to the classrooms of Cooper in September, there gradually grew as in past years the clubs and organizations which have always played a small but important part in the lives of Cooperites. Several of the clubs never quite managed to hurdle the summer, but, reflecting the turnover of students, new ones emerged to take their places.

Entering its fourth year of activity, the Yacht Club continued its steady climb in popularity and success. With the assistance of Prof. Young and through the financial aid of the Alumni Association, the members of the group completed this year their third dinghy. Offering a stimulating outdoor activity to whomever is interested, both expert and novice alike, the group should become a relief haven for hard-pressed Cooperites for many a year to come.

The shooting of firearms is an intriguing sport to many Cooper students. The Rifle Club reflects this keen interest. The group is a fairly large one, and when the members get together on a Friday evening for shooting practice, it is also an evening of merriment and pleasantry.

For the members of the Photography Club, this hobby is the legitimate means of expression. Not having much money for expensive equipment, the members of this club have made efficient use of a small room which has been loaned to them by the administration. Over a period of time, they have managed to outfit it with all the essentials of a completely furnished dark room. Meeting frequently to discuss the latest techniques in the field, and occasionally obtaining the time of experts and films to aid them in developing the skills involved, the members are improving their own methods. Running an occasional photo contest, and an exhibit on the walls of the library, the group has attracted widespread interest. The club, revived only two years ago, promises an active future.

(above) *Maestro Homburger preparing the Glee Club for the Yuletide Season.*
(center) *Members of the Math Club in a heated debate on thermal differential equations.*
(below) *Competitors beware! Here comes another of Young's yachts!*

wednesday thursday friday monday

(above) *A loyal friend consoles "The Man Who Married A Dumb Wife" in one of the Drama Club's productions.*
(below) *Members of the Dramatic Club relaxing before rehearsal.*

Moving into high gear soon after the opening of school in September was the Dramatic Society. Composed of extroverts, a surprising percentage of whom are engineering students, the group lays out its production schedule for the winter and puts its collective nose to the grindwheel immediately. Not taking up the question as to who benefits more from their performances, the audiences or the actors themselves, it would seem that this is one case where everybody wins. The Dramatic Society has a long record of hits, and this year is no exception. There is always a good turnout to their productions (no tariff, you see), and good or bad, the shows are always talked about.

Without the fanfare of the "we-did-its", but going about its activities in an efficient and determined manner, is the Debating Society. With their activities confined to debates with the societies of other colleges, the members are primarily interested in developing in themselves the ability to talk persuasively and articulately. This group is one of the most serious on the campus, and one of the oldest. With the stimulating Mr. Caldiero as its advisor, the Society is an outlet for the voluble soul who likes to rattle away on any subject.

If it is not the oldest group on the campus, this club indulges in by far the oldest sport known to man. Although the members of the Fencing Club put out a team to compete with other schools, they are primarily interested in the exacting skill and the high degree of muscular coordination which form the basis for the skill of a fencing master. The foil exacts a thrill with every touch, and it demands the best in each of us. The members of this group believe that there is no sport extant which can provide the split second action and the flashlike motion of the human body as fencing does.

If the sailor can go boating on his day off, then there is no reason why the engineering student cannot have a Mathematics Club for his leisure hours. He does. When the members attend the weekly meetings, it is usually one of them that gives a lecture on some interesting topic. Occasionally, the subject has a wider interest among the other students, and in that case there is usually a large attendance. But large or small, the Club fills a need: the

(above) *Art Discussion group discussing a Picasso.*

(below) *The Debating Society shown in their favorite manner of relaxation, standing up.*

opportunity for the students to discuss some of the abstract ideas and implications arising occasionally in their school work.

Decrying what is usually called the ivory tower type of education, the members of the Young Progressives of America think of themselves as not only the students of The Cooper Union, but also as citizens of a great nation and a pitiful world. Dropping the Citizens from their name of a year ago (the YPCA) they gather frequently in order to discuss the problems which distress vast multitudes of our brethren around us. Tackling brazenly the shortcomings of our own American democracy and the social problems arising out of mass prejudice, their meetings and discussions attract the attention of the student body.

Operating on the premise that the American democratic system is the best in the world today, the members of the Students for Democratic Action seek by discussion to improve the system and to remove the social and economic injustices which do exist. Taking a positive stand against all varieties of totalitarianism, the members of this club, which is affiliated to the national ADA, first got underway late in the spring of the last school year. Its first full year of activity has been of interest to many students.

Laboring under a national organization which has been tearing itself apart through internal strife, the Cooper chapter of the American Veterans Committee has managed so far to avoid becoming involved in the squabbles. The purpose of the members is to discuss the problems of the veterans in terms of the broader consideration of the interests of the nation. High in their list of objectives is to seek the way a vet may contribute to the establishment of a just and lasting peace. The future of the AVC at Cooper is easy to predict: in a matter of one or two years it will be gone from the campus by virtue of the gradual disappearance of the student vet.

Reflecting the interest in the birth of the new state of Israel, a local chapter of the International Zionist Federation of America has appeared this year at Cooper. When the members of this group get together, the topic of discussion is usually about the developments in the new state. Occasionally a speaker talks about the system of collective farms which has been developed there, while at other times the group meets in order to learn some of the folk dances of the people of this ancient land. The get-togethers are generally stimulating, and in many respects it aids in the thinking of the problems of minorities throughout the world.

The members of the Chess Club require very little space for their activities; when they get the urge for a little peace and quiet, it is easy to open up a chess board and play one of the oldest games known to man. The chess players were not able to compete with other schools this year, due to the lack of funds, but since the main purpose of the group is to provide relaxed mental activity for the harried student, the members feel that their prime objective is reached through the weekly sessions.

thursday friday monday tuesday wednesday

In addition to the work which the art student accomplishes during his school day, his education is not complete unless he indulges in outside reading and trips to the art galleries. The Art Discussion Group exists for the same reason, to provide him the opportunity to supplement his school work. One way the Group does this is to subject the art instructors to questions of general interest during its meetings. The discussions that follow are usually interesting, stimulating, and broadening. Once in a while an outside speaker is invited. There is no restriction on subject matter except that it can be called art. Although this group is formed of students within the Art School, one can wonder what the effect would be of exposing some engineering students to this type of treatment.

By the time the Cooperite gets into his second year, his formal physical training is at an end, and from thereon in he must plan his own program. All too often he neglects this part of his life. The group, newly formed this year, which provides the opportunity for him to get outdoors all year round is the Hiking Club. This year the members of this group have built themselves a lean-to in Camp Green, so that when they go on their all night camping trips there will be some sort of a shelter in case of rain. The large number of activities being organized by the students for Camp Green would seem to indicate a trend which is very much desired. The students are now first beginning to realize the potentialities of that wonderful estate in New Jersey, and it is hoped that the future finds an increasing number of Cooperites taking advantage of the opportunities it has to offer.

The only group on the campus which is strictly of a religious nature is the Newman Club. Devoted to the development of the cultural and spiritual traits of

(above) *A group of our more serious students playing chess. It is Milt Marder's move.*

(below) *Two photography experts in a dark room of the Foundation Building.*

the Catholic students, it is one of the oldest in the school. Affiliated with the national organization, the members meet bi-weekly to discuss topics which are of mutual interest. The activities of the Newman Club complement the narrow materialistic learning which is inherent in much of our education today.

Due to the great expense involved in inter-collegiate competition, the clubs which engage in such activities are always hard pressed for money. This year the Cooper Union Alumni Association recognized this situation and gave financial aid to the Yachting and Fencing Clubs. Also, in an attempt to establish closer personal relationships between the Alumni and the Under-Graduates several members of the Alumni Association formed a Rifle Team for the purpose of challenging Cooper's Varsity Team. Although the Alumni put up a good fight, the Varsity Team managed to emerge the victors.

The Rifle Club, which had been attempting to make both ends meet for several years on a very slender budget, was finally rescued by a very generous and unexpected donation from Mr. Norvin H. Green. The donation, exceeding $500, was used to furnish the Rifle Club Cabin, to buy new and needed equipment for the Rifle Team and to establish a Rifle Marksmanship Trophy to be known as the Gano Dunn Cup.

In addition to the various clubs that exist at Cooper there are also many Fraternities. Membership in these fraternities has been very beneficial to many Cooperites in that it has enriched their social life and allowed them to form friendships with other students, whom otherwise they might never have known. This year marked the appearance of a very healthy realization among the Fraternity members that they could use their organizations to make life at Cooper better for everyone. A visible evidence of this new trend of thought was the sponsoring of the home basket-ball games. Those of us who attended these games will long remember the effort that the members of AMS, LSK, ODP (alpha and delta), PSO and SKT put into making these affairs the great successes that they were.

(above) *Hiking Club doing it the easy way.*
(below) *Some group building a lean-to at Green Engineering Camp.*

Each organization and club that exists in the school does so only because there are some students who are willing to donate the time and effort required to keep these organizations functioning. By means of a complex empirical formula service points are given to the students who engage in the various activities. Each year, at Class Night, the students who have managed to accumulate the required number of service points are awarded the coveted Gold and Silver 'C's. These awards point out to the entire world the Cooperites who "have done a job and done it well."

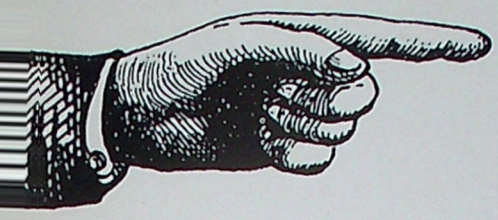
activities award

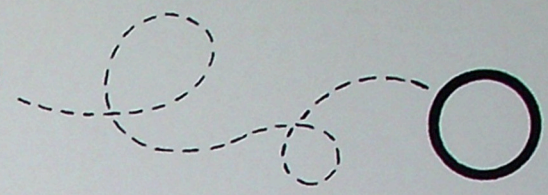
SILVER C

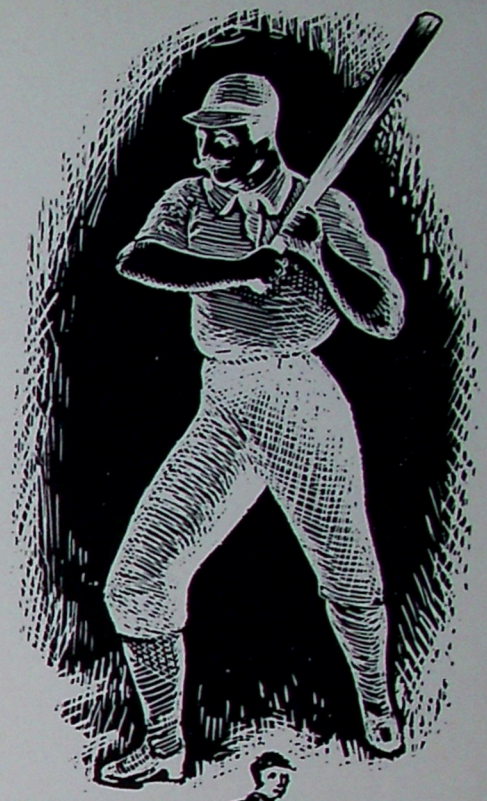
Bernard Fisher
Edwin Gregg
Irving Hammer
Milton Marder
Norman Perry
Irving Rosner
Eli Rubin

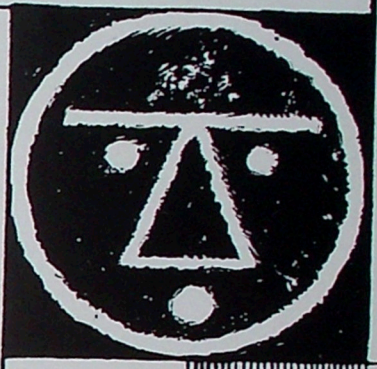
GOLD C

Joseph C. Apsley
Donald Bass
Jim Boulgaridies
Max Berry
Rubin Boxer
Jerome Brody
Herbert Cohen
Robert Comninos
Marvin Dean
Morton Elkort
Joseph Engelberg
Norman Feldman
Gerald Gardner
Carol Glass
Harold Goldseger
Jack Goodman
Norbert Hauser
Robert Komarow
Irving Karsh
Sheldon Katz
George Kaufman
Gerhart King
Helmuth Knapp
Frank Kovacich
Stan Kugler
Vic Liebowitz
Rita Lobell
Myron Manes
Harold Margolis
Thomas Matcovitch
Jack Meienberg
Vivian Mutchnik
Leon Novet
Annamay Olsen
Ernest Oppenheimer
Irvin Rosenhouse
Norman Sachs
Leon Scherz
Henry Schwartzberg
Joseph Sidoti
Marvin Siegel
Audrey Silbey
Julian Spector
Gladys Torres
Jerry Vidibor
Herb Wagner
Willard Warshofsky
Marvin Wax
Peter Zachman









fencing

bowling

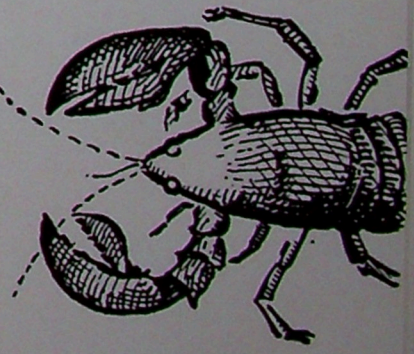
SPORTS

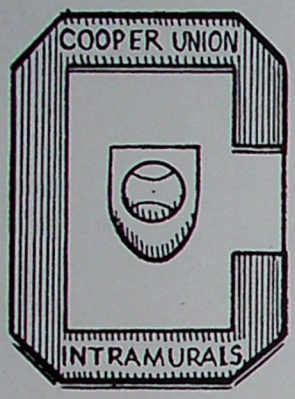
rifle club

basketball

aquatics

yachting





The third post-war year of activity of the Athletic Association was by far its most successful. A.A. activities began with the First Annual Field Day and Picnic at the Green Engineering Camp. The 150 people who attended this affair enjoyed excellent weather for a full day of outdoor sports followed by an enjoyable evening of dancing in the main lounge. Mrs. Eichler, of the Cooper Union Women's Club, generously donated her time and effort to provide refreshments.

Back in the city the regular series of intramural tournaments began. The opener was the volleyball tournament, managed by Stan Hirsch. The winners of this tourney were the 4DCE's, the third time in a row that this particular class has taken the tournament. The bowling tournament followed the volleyball. Again the tournament was taken by a three time winner, ODP Fraternity being the master keglers.

The series continued with the high-point of the winter, the hard fought basketball contest. With the coming of spring, however, the fickle sportsmen of Cooper forgot all about their hoops, picked up their bats and gloves, and went off to the diamonds for the softball tourney. Sid Kaufman played the part of Cooper's Happy Chandler. Held concurrently with softball were the singles and doubles handball tournaments, which completed the intramural year.

This year each of the basketball game dances was sponsored by one of the fraternities. Because of the competitive spirit existing amongst the frats, each tried to outdo the other. As a result, the dances this year were remarkably successful.

As a fitting conclusion to a year of sports, the Third Annual All-Sports Dinner was held May 6 at the McBurney Y.M.C.A. It was at this dinner that all athletic awards for the year were presented. While on the topic of presenting awards, Pres. Thomas J. J. Matcovich, the officers, and members of the Governing Board deserve the heartiest congratulations for so ably coordinating the far-flung activities of the A. A.

. . . awards

Tom Matcovich, president of the Athletic Association, leading the heated discussion as the organization is in the process of deciding who will receive that all important player of the year award.

Player of the Year

Walter Nazarewicz

3 Year Yachting

Fred Horn

3 Year Rifle

Carl Apsley
Herbert Cohen
Logan Ingram
Robert Kalin

Yachting

Ed Trunk
George Wrage
Jack Meienberg
Gus Rothmaler
Joe Sidoti

Rifle

Robert Cox
George Kaufmann
Harold Kleinman
Donald Reiser
George Wrage

Basketball

Walter Nazarewicz
Harold Farrington
George Tishkewitz
Fred O'Driscoll
Kenneth Downs
Gilbert Marin
Fred Horn
Alex Katz
Jack Goodman

Fencing

James Brady
Harvey Cohen
Peter Hofmann
Victor Liguori
Ernest Nussbaum
Arnold Olsen
Gerhard Reinert
David Wassertheil
Norman Sacks

y a c h t c l u b

We at the yacht club like to think that we are one of the most active and enthusiastic groups here at Cooper. First of all, we have just succeeded in gaining admission as full members to the Inter-Collegiate Yacht Racing Association of America. Previously, we had been associate members, but now we are on the same level as schools like Princeton and Harvard. Of course, this means stiffer competition and longer trips for our teams. However, if we continue to receive the heartening moral and financial support we have been getting from the alumni, the faculty, and the student body, we are sure we can prove that Cooper stands up among the best of them.

Closely connected with our new status is the fact that this year, for the first time, Cooper will play the role of "home team." Because of our paucity of boats, up to now we have always been the visitors, but with two completed boats, and a third well on its way, we can be host to other schools. We believe these "firsts" are indicative that the Yacht Club is a growing, developing group, with a promising future ahead of it.

As you can see, we are quite proud of our group. However, in all our activities we try to keep in mind our ultimate objectives, as stated by our constitution, "To foster interest in the sport of sailing, to build comradeship among the members, and to represent Cooper in inter-collegiate yacht racing."

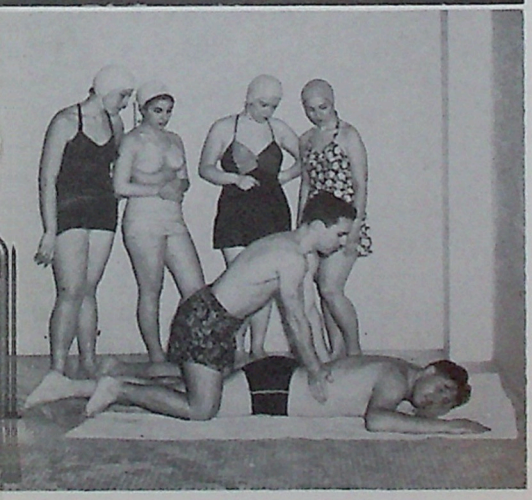
rifle club

This past year, the Rifle Club Team, itself an extra-curricular activity, completed an extra-extra-curricular job. Aside from their regular pastime of punching holes in paper (at a distance of fifty feet), the boys finished working on their log cabin at the Green Engineering Camp. The sixteen by twenty foot edifice was built almost entirely of oak and hickory logs.

Carl Apsley, manager of the team, kept alive an intricate network of communications during the summer to keep the gang together. They were scattered from Long Eddy, N.Y., to Washington, D.C. Came Friday, George Dombrowski and Howie Silfin left Washington to get along as best it could, and rushed up to camp to lift their two logs in place every week-end. Prof. Hope tore away from his "Thunderlodge II" to contribute his magnificent skill with the axe. Slowly but surely the thing passed through the evolutionary stages of a log bunker and a corn-crib, until it finally was roofed, chinked, and furnished as a bona-fide log cabin.

Back in the city, the boys continued firing against the best teams in the Metropolitan area. Captain Herb Cohen was rated top man of either team in several of these matches. Ed Schmidt's steady hand enabled the team to take its first practice match against the Brooklyn Poly ROTC Team.

Taking a page from Green Camp, the Club has gone co-ed. Among the girls enrolled are Cathy Levanis, the treasurer (with hardly any treasury), and a varsity team member, Leila Press.



aquatics

The swimming facilities of the Cooper Union consi. of a twenty yard pool with a diving board, lockers and showers in the basement of the Church of All Nations, a community center at 9 Second Avenue. These facilities are available to all students from 5:00 to 7:00 P.M. on school days.

Organized instruction is given at the pool in swimming and in senior life saving for men and women. Beside their intrinsic athletic value, the life saving courses have led to many profitable summer jobs as general or waterfront counsellors.

As a social event "Splash Parties" or co-ed swimming sessions are held several times throughout the year. Stunts, games and races are presented. The feature event is the free-style relay race between teams from the Art and the Engineering schools, which the artists have won the last two times.

f e n c i n g

For many years Cooper Union has been known for its fencing team. This year the club has undergone a complete reorganization; as a result of ineligibilities and graduations, the squad has had to be virtually reborn. After an intensive publicity campaign, enough interest was aroused to supply the necessary raw material. Coach Harry Lucia, a renowned fencing master, assumed the tremendous job of putting a team into competition after only four months of training.

A full nine-man team has been fielded, and this in itself represents an achievement, accomplished only through long arduous hours of practice. The season will probably be a complete failure as far as the won-lost column is concerned, but in view of the establishment of a solid foundation for bigger and better teams, the year's objective has been far surpassed. Interest and general spirit has grown so much that the Alumni Association unhesitatingly contributed one hundred dollars to re-equip the team. This was at first deemed ample, but the increase in members has caught up with the increase in funds. There seems little doubt that within a few years, Cooper Union will once again become prominent in the fencing world.

b o w l i n g

The past year produced a new team representing Cooper Union in intercollegiate competition: the bowling team. The team was organized largely through the efforts of George Polyn, 3 DCE, and was entered in the Intercollegiate Bowling League. Among our opponents were Fordham, Pace, St. Francis, St. Johns, L. I. U., Queens and Hunter (men only!).

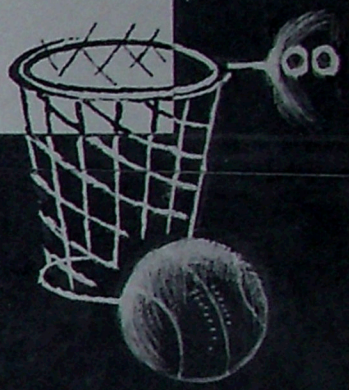
After a good start, the team settled back into sixth place, just ahead of Queens and Hunter. Considering the size and prominence of the other schools, our team made a good start in intercollegiate bowling.

Three-game sets were bowled every Sunday at City Hall Alleys. Through a unique system of charging members a nickel every miss, the team was able to procure resplendent maroon and gold bowling shirts, which did much to impress the opposition.

The team was headed by George "Beer, Beer" Polyn, the only man alive known to bowl with a cigar in his left hand; Tom Matcovich, the anchor man; Joe Deare, intramurals high average man; Bob Muller, in the leadoff spot, and Ed Norman, 4 DEE, and Fred Housley alternating in the fifth slot.

As three members will graduate in June, the team looks forward to acquiring some of the Frosh and Soph intramural stars to reinforce the returning veterans in their second year of competition.

basketball

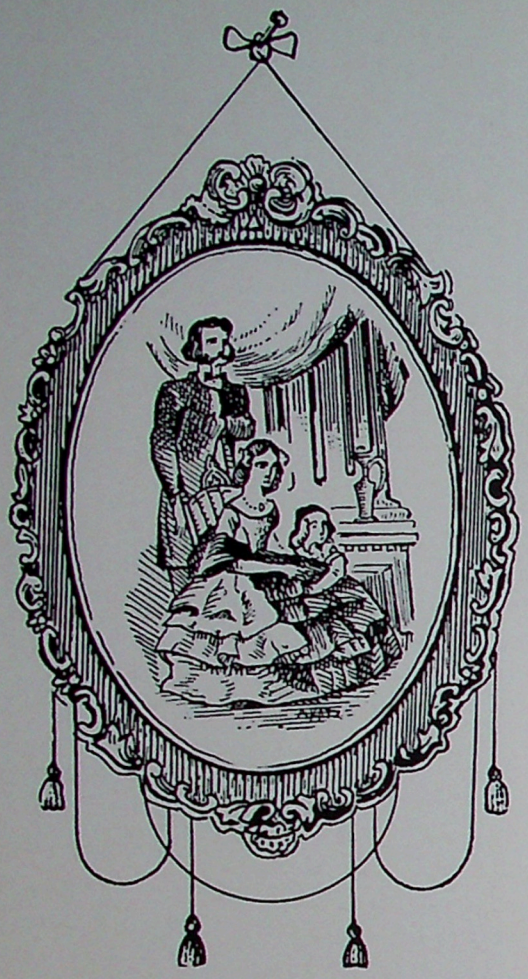


Back in October, the future looked promising for the Cooper Union varsity basketball team. With the return of Walt Nazarewicz, Gil Marin, Fred O'Driscoll, Fred Horn and Ed Hilzinger from last year's successful quintet, plus three good Freshman prospects in Harold Farrington, Ken Downs and George Tishkewitz, Cooper partisans were hopeful of another winning season. But the old nemesis of Cooperites, scholastic ineligibility, combined with recurrent injuries to key men proved too much for the spirited Cooper five.

After the traditional opener with the Alumni was cancelled the Coopermen faced Brooklyn Poly, the team that had handed Cooper a 35 point shellacking the year before. But this year, sparked by the Freshmen whiz kids, Farrington and Tishkewitz, Cooper stayed close all the way. In the final minutes, however, Poly managed to squeeze out a 66-58 victory over the tiring Pioneers.

Perhaps the most memorable victory of the season was the overtime thriller against Yeshiva. Leading 59-57 with 10 seconds left to play, Cooper saw Yeshiva tie the game on a desperate rebound heave. But the Pioneers shone in the overtime period outscoring the Washington Heighters 12-2. Final score: Cooper, 71; Yeshiva, 61.

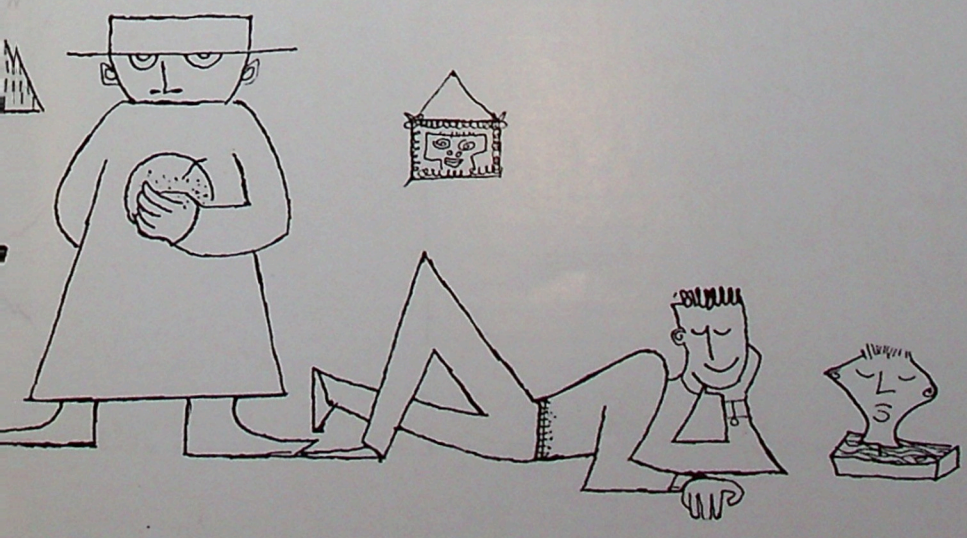
Although the squad's record may not be impressive the boys should be commended for their spirited play throughout the season. Such unheralded Freshmen as Al Anaya, Joe Fischer, Jerry Franklin and Pete Diaferia have gained valuable experience and represent a supply of reserve strength for next year's team. With only Farrington, Tishkewitz and Downs as a nucleus the Freshmen must fill the gaps left by the graduation of Marin, Nazarewicz, O'Driscoll, Horn and Katz.



TINTYPES

THIS section contains the tintypes of those who are leaving our family circle. Though graduating, they will always be regarded as members of our Cooper family. Each one has contributed to the pattern of our school life for the past three or four or more years.

Everyone likes to look into his family album and reminisce. The 1949 CABLE, as this year's edition of Cooper's family album, has, in addition to the snapshots, brief write-ups of each graduate. These sketches, written by students acquainted with the graduates, are an attempt to describe those characteristics of the individuals that have endeared them to us. In some cases they describe the personality, in others the foibles or idiosyncrasies of the graduate, and still others are little anecdotes. Added together, these word pictures comprise a record of the unique personality of the 1949 graduating class.



1 **Chester J. Abend.** "Know ye! All architects. I wish to declare myself morally and legally irresponsible for all write-ups contained herein pertaining to 3A1. I did it and I'm glad." (Editors note: Chet informs us that he is accepting a job with the Borneo Architects League). **David Ackerman.** Dave has gone quietly through the hallowed halls of Cooper taking care that every check of his Schweinburg Scholarship reached him on time. In 1946, he made a brief trip to Japan to acquire a Japanese slide rule. He felt he needed new scales to conquer. **Eugene W. Aha.** Gene had the exceedingly good fortune to have gotten married early in 1948. In this way he kept himself from getting lonely and bitter on those long winter evenings when he was struggling to beat the deadline on those notorious EE lab reports. **Doris M. Ahlers.** An architectural draftsman who yearns to be an architect, Daris came to Cooper directly after receiving her BA from Wheaton College, Mass. She is lucky in that she lives within easy walking distance of the school and is able to save carfare to and from classes.

2 **Thaddeus P. Albinski.** An ex-air corps man, Ted is another one of the many who had his education interrupted by Uncle Sam. An architectural draftsman by day, Ted attends Cooper at nite and all who know him agree that he should go far in his chosen field. **Theodore Alper.** A cynical, bitter pragmatist, Teddy is a keen student of Wall Street, stocks, speculation and fluctuations. Known to all as "Carbon Copy" Alper because of an unusual ability to copy lab reports in sextuplicate, each copy as clear as the original. He is also a member of Tau Beta Pi. **Anthony P. Ancona.** Tony has been around Cooper a bit longer than most members of the present graduating class. Starting school in 1935, employment on the construction of the Quonset Point Naval Air Station and wartime service in the Army, delayed the completion of his education. He likes music and enjoys dancing. **Arthur M. Ariessohn.** Art is decidedly a man of letters, holding a BS from City and an MA in mathematics from Columbia. An aerodynamic project engineer for Sperry, he ascended to the vice presidency of Tau Beta Pi for his contribution to extracurricular activities. A married man, he has two charming children.

3 **Raffaele Ascione.** Hardworking, conscientious and thorough, Ray is always busy remodeling his house, much to the detriment of his sleeping hours. He shares this house with his wife and daughter. Ever since his discharge from the Army as a First Lieutenant, Ray has worked for Western Union. **Theodore Aster.** Cheerful, friendly Ted has captained the CE volley ball team for three years, and has been on winning intramural teams in the volleyball, softball and handball tournaments. A feature writer for the Survey and the Cable, he is a past vice-president of the ASCE. **William A. Auerbach.** Bill never had any particular difficulty with his subjects excepting Thermo. Mr. Parsons changed our Auerbach into Hoffman for the year—but what's in a name? Bill has made a study of engineering ethics and can spin many a tale on the finer points of the profession. Despite a long uphill fight, eleven years to be exact, he is proud of finally getting into the Cable. **Robert W. Bassemir.** Bob was one of those impatient engineers who couldn't wait till graduation, having gotten married in his senior year, forsaking the normal ChE indoor sport of Bridge. Secretary of Tau Beta Pi, he is also quite a chess player.

Howard Becker. "School Chum" Howie Becker is another of the ME department's products slated to go out and enrich the world after graduation. Be it engineering, radio, photography, or even the fur designing field, Howie will undoubtedly make a go of it after he's made his choice. **Irving Begelman.** Breaking all records, Irv is the president of the Day Dance Club. He is really a good dancer and has made use of this graceful talent in the softball and volleyball intramurals. Irv is also a member of the AIChE and the Cable's newly acquired Business Manager. **Harold Belofsky.** "What does Belofsky say about this?" asks Murray Greenberg. When any information is offered he knows, as do the rest of the ME's, that Harold is one of the class authorities on almost any subject, technical or otherwise. He is truly an engineer's engineer. **Barnett B. Berliner.** Besides submitting those charming architectural solutions, Barney contributes to the general morale of the class; in other words, he asks swell questions that are really helpful. Some day his revolutionary ideas on the use of transits will make him a leading architect—provided he uses a transit.

Max Berry. This Tom Mooney Hall boy is the only member of the EE class whose tone can cause a certain nervous instructor to stutter. It is suspected that Max's secret ambition is to attain a senior rank over a certain electronics instructor who is also a minor officer in the Naval Reserve. **Howard B. Betts.** Howard is ambitious and smart, and most likely to succeed in his goal of being a top-flight mechanical engineer. He has always worked very hard and applied himself assiduously to his work. Howard rides the Brighton line to school every night. **Max Birnbaum.** Max quotes Thermodynamics like a student of Shakespeare. One of the most industrious and well-liked members of the night Chemical Engineering class, he plans to take his masters at Columbia. **Elaine S. Bloombaum.** Elaine is best known for her dancing, accordion playing, infectious smile and laugh. A New Yorker turned Californian, she returned to Cooper to study fine arts, but will be going back to the land of snow and sunshine after graduation.

Meyer Borkin. Mike intends to continue painting and college. This popular boy has made a lot of friends at Cooper and hopes to keep their friendship. Likes all types of music, sports, drinks, and, oh yes—women. **Sophia H. Borysewicz.** Vivacious Helen is always willing to coach a fellow student in the mysteries of advertising production, at which she is somewhat of a genius. She holds a top-notch advertising job and looks the part. One of the greatest things that happened to her at C.U. was being asked to pose for a portrait by Edwin Dickinson. **Rubin Boxer.** Consulting psychologist without appointment to the faculty, Rube excuses every instructor's actions by telling you what mental blocks he is suffering from. Incorporating Pearl into all Cooper affairs, Pearl is known to have asked Professor Roemmele to play "Entropy, by Mollier" after a basketball game. **James J. Broderick.** "Always has an air about him." Jim can advise you as to the best flavor concoction, since he has been working seven years making and compounding flavors. It seems his nature and work are one, because his attitude is always friendly and jovial. He is going for his master's at Brooklyn Poly.

1 **Marvin Brown.** "I positively have the most beautiful daughter and wife in the whole wide wonderful world. That's something to be thankful for." He is also thankful that the long grind is over. **Gisela Bye.** Gussie is the gal who sits at the back of the class and quietly turns out some of the best work in fourth year advertising. Quiet and unassuming, she finally succumbed to the love bug last June and married Larry, a salesman who had been trying to sell himself to Gisela for a long time. **Bernard J. Byrne.** Barney, the life of the thermodynamics class, is conducting a one man campaign to make St. Patrick's Day an official school holiday. This recipient of an O'Rourke Scholarship is a member of ODP and has been treasurer of the Newman Club. **Jules L. Chaboty.** A member of ODP, this ChE has gained the title of "sweet singer of the chem class." Jules sports a congenitally happy frame of mind, which even all the trials and tribulations of his stay at Cooper could not upset.

2 **Abraham R. Charlip.** Abe is a novelty in the art school—a sane "mad genius." A solid man of principles, this fine art student, would consider it "giving in" if he had to shave. A popular lad, he will be remembered for the extra something he could give to a painting. **David H. Charney.** Dave's been walking through the halls on his hands, swinging aloft, or executing amazing feats of walking taught to him by his daughter. When he isn't talking about gymnastics, showing pictures of his wife and baby, or painting pictures with a T-square, he's plucking away at a guitar and crooning to the skylight. **Isaac E. Chernoff.** Ike is congenial, clever and thorough, having an analytical mind. He is fond of collecting enough material to construct something which he never gets to build, and buying books which he never has time to read. Starting Cooper in 1937 he took time off to travel around the globe with carbine and C-rations. **Donald W. Chilton.** Deacon Chilton (he really is one) is the class chaplain. Premature gray is the crowning touch for the able ASCE president. Direct in his manner, with a flair for reciting poems and ditties, Don ventured into other activities such as treasurer of the Senior Prom Committee.

3 **Sidney Chipkin.** Way back in '36, Sid, then a robust, stalwart, blushing youth, entered CU. Now, still blushing, but with engineer's stoop, executive's ulcers, middle-aged spread, membership in AMS, a singing wife and a bawling baby daughter, he graduates. **Emma I. Clark.** Emma is a very popular night artist from Brooklyn. She is a serious student of the Fine Art Decorative Art section, and her work shows a flair for the original. She shows definite promise of success in her art work. **Albert E. Cohen.** Al, a small man with great astuteness, is another one who does a million things at once. He manages a dye manufacturing concern during the day and takes courses on dyes and coloring matter at Columbia besides his work at Cooper. **Herbert S. Cohen.** Exuberant Herb, since starting Cooper in '42, has been captain of the Rifle Team for two years and can sure shoot. One of the original builders of Silfin Lodge, Herbie hopes to see the day when Professor Hope finally shoots a deer.

1 **John T. Colombo.** A married man with three children, John entered Cooper in 1939, but was forced to leave this establishment for three years at the request of Uncle Sam. He hopes to enter the field of central station power generation upon graduation. **Robert Comninos.** A renegade ME, Slob has never been known to "regularly" copy lab reports. At the slightest provocation, Rapid Robert will expound readily on why girls are different from boys. Always trying to outbowl Joe Deare, Commonlouse has yet to succeed. In his spare time he works at being the head of SKT. **Thomas J. Condit.** Tom is the steady spiritual type; we have never even seen him waver. He has a fine sense of balance in architecture too. His determined idealism has made him give up cigarettes—many times a day. He also has decided to give up nite clubs and devote himself to teaching egg control on his chicken farm in New Jersey. **Andrew C. Connell.** Absent from school for four years while in the Army, Andy is coming up for his final parole from school. During his non-class hours, he shares his time with his wife and his job as an architectural draftsman. His unusual ambition is to be an artist.

2 **Martin D. Corin.** A former member of New York's Finest, Martin was also a shipfitter and loftsman before he decided to take up engineering. A member of Tau Beta Pi, his ambition is to catch up on his sleep, see some plays and read a few books. **Marvin A. Dean.** Good old Gunga Dean will, with the least provocation, go into a perfect imitation of a steam valve ready to blow. Nevertheless, he is a handy guy to have around to wire those monstrous Machines Experiments. One wonders how school history could have been recorded without MAD's never ending picture taking. **Joseph H. Deare.** Joe is the strong-arm circulation manager of the CABLE. This BRBoy has been characterized as being an urban Li'l Abner—strong, handsome, and girl shy. Joe is active in all extra-curricular activities; his official capacity is about three quarts. Just to occupy his spare time he is a member of SKT. **Gordon O. Dedrick.** "Colonel" Dedrick is the man who is always smiling. Humorist, class orator, assistant editor of the Survey, and the social committee of the ASCE, are but a few of his accomplishments, aside from a Dedrick Jr., who is inclined to be like his dad.

3 **A. Richard de Natale.** Historical guns, foreign cars and brightly checkered vests are some of Dick's interests. His car "the Lilliput-put" is his baby and he treats it like one. Moody, though completely likeable, he is set to go to Yale or Dartmouth etc. "Pip, pip, old chap." **Nancy L. Derenna.** Nancy is one of the popular day artist of 3B, Fine Arts. If she and Steve fight so much now, what's going to be afterwards. She is a talented artist with a genuine flair for her work, and she certainly should go far in her field. **Martin Deutsch.** The word salesman implies many things, i.e.—he sells his colorful personality, which has made many friends at Cooper. Easy-going, nothing bothers him except women, but that he likes. A friend anyway. **Abner Diamond.** Have he and Mimi finished their apartment or has he given up all to do his photography homework? Their favorite pastime is mixing chartreuse and rust paint or getting out the vote. He is one of the gymnastic-minded, guitar playing advertising students.

1 **Vincent DiGennaro.** Vince has had an apparently smooth time of Cooper's nite engineering schedule, the result of much behind the scene plugging. Unhurried and sure, he often made one wonder what was so tough about night school anyway. He is also a man of many letters, namely TBP, PSO, and ASME. **George E. Dombrowski.** Pensive Dombo, another of the Silfin Lodge builders, has won his letter on the Rifle team, his gold C on the Pioneer, and can be heard every once in a while on ham station W2SFD. He entered Cooper in 1943, a year after his brother, Henry. **Nathaniel R. Dover.** Rod is a tall, suave, smiling, easy going bachelor (but not for long, referring to bachelor). Not very active in school, he still will remember Cooper as a tough fight. A Brooklyn lad, he has spent many arduous hours travelling on the BMT. **Mary E. Doyle.** The pride and joy of Crestwood is this Irish lass. It's not every one in Crestwood who has the privilege of attending Cooper Union and making good, so the saying goes upstate. And they can be justly proud of Betty. She spends her day time hours as a picture researcher with Life magazine.

2 **John P. Dusch.** John lives just a short distance from school and shouldn't have much trouble getting to the ME lab on time. Has anybody ever said "Does Dusch dusch everything?" **William C. Ebeling.** Bill, a four year man, is known as "Hippity-Hop" because he experiences beat frequency displacements while playing the piano. In his quest for knowledge, Bill continually floors his instructors with a steady barrage of questions. **Rita Ehrenberg.** Rita, member of YPA and former member of the Cable staff, recently married Tony Peranio of the day engineering school. She loves felines, and it moved her deeply to part with her cat, King George, when she married and had to leave him at home. **Lawrence R. Eisenstein.** After four years of Brooklyn nite math courses, Larry, a straight "A" student, came to Cooper to become acquainted with the rest of the alphabet. A man of experience, he engages in a host of activities, including tinkering with the violin, mandolin and radio, and spending time with his wife and young son who was presented to him in the throes of an examination.

3 **Harold N. Enberg.** A foreigner from across the Hudson in Dumont, Harry commutes daily by subway, bus and train to get to and from classes. The few minutes he has left over, after working all day as a piping layout man, attending Cooper and commuting, he devotes to his lovely wife. **Norman J. Epner.** NJE is a red headed EE of distinction. Extremely active in extra-curricular affairs, he manages to coast on his brains and adroitly clever wit. He likes women, the basketball varsity, which he manages, the outdoors, and being candidly modest. Norm is not the prototype of the quiet reserved EE, but is appreciated by his friends and LSK. **Samuel W. Erde.** "My name is Sam, I'm just one of the boys," says this ex-officer. Sam goes out for all sports in his own "aggressive" way, and he never fails to give that old college try. He was a member of the CE volleyball and softball intramural teams, and is interested in photography. He has done extensive work in the field of parking problems. **Robert F. Ernst.** Bob is a fellow who will be remembered for being a sincere, earnest and conscientious worker. A married man, he nevertheless was honored with membership in Tau Beta Pi. He was a member of the AIEE, and secretary of PSO.

1

Arthur J. Estin. The quiet type with hidden depths, Archie's magnum opus occurred last November when he flew out to Arizona for a brief "vacation." Somewhere along the way he got married. How and why he ever managed to return to school within two weeks will remain a perpetual mystery. **William Farr.** Bill will continue his studies in Chicago to obtain a degree and afterwards he intends to teach. A high ranking advertising student, he will attempt to juggle advertising work, a pretty wife, and a deep interest in photography. **Frances L. Favuzza.** Frankie is pep itself, but withal the introspective artist. A commuter from Brooklyn, via the subway, her chief claim to fame here at Cooper is solid support for our athletes as a cheer leader. **Maxine K. Field.** As the sweetheart of Cooper Union, she has weaved herself in and out of many a man's heart. In doing so she has been playing the "fields," one of which is close to every commercial artist's heart, and has found there is clover in each of them. She has a swell sense of humor and a "come up and see me sometime" look Friday, Monday, Tuesday, etc.

2

William B. Finkle. Lord High Chancellor of Zudville, Bill indiscriminately carves ZUDS on sad teachers, little blondes or bored models. It's not that teachers dislike him, but he generally is seen climbing easels, frightening EE's, mixing ink in the hypo pan, or hurling milk containers at Maxine when he is not chasing her. **Gloria Fiorentino.** Good Two Shoes is fashionable as anything you can think of though Harper's Buzzard keeps nagging at her to cut her hair. She makes "Brintz" in a "pig's eye," and this is easy since she has pig's eyes. She has ambitions to be an art director, in order to further the cause of modern design. **Murray Fishman.** Murray is a night artist, in the fine arts-decorative arts option. He comes to Cooper from the wilds of Manhattan. A popular lad, his work was often admired for his originality and that extra little touch he always managed to get in. **Winifred A. Fitch.** Winnie, a former cheerleader, is married to Joe Phelan, and they enjoy sporting matching hunting outfits to school. Winnie, Joe and Pippa (her dog) really make quite an attractive trio.

3

John Flaizik. John, who is affectionately known as "Big Injun," doesn't believe in romantic love (he claims). He comes to school from Jersey everyday by the complicated combination of bus, ferry and subway, and he returns in the evening by the same conveyances, but in reverse order. **Donato P. Forlenza.** Dan is quitely sensitive to the subtler things in life, his paintings and advertising art show a great variety of good taste and execution. His tastes in music veers toward Burl Ives and folk songs. He plays an accordion, has secret ambition to dance on the stage, and also is free-lancing as far as the petti-coat race is concerned. **Arthur J. Foulkes.** Artie is Jersey's answer to Paul Rand, and not a very loud answer either. Jersey warns all the girls (married or single) to watch out for him. He has traveled from Mexico to Maine, and shares a studio with Normandia, Trakis, Burgess, Oberman and company. **Florence Fox.** Flo lives within walking distance of school, so she decided to spend her evenings here studying the decorative arts. While passing the time here, she showed a decided flair for her work, and she also made many fine friends.

1

Edward S. Frank. Unassumingly, Eddy walks up to you and proceeds to unload his intelligence on your open mind. If you ever need your questions answered, just ask Eddy; he sticks at it long enough to find out. Formerly an assistant to Mr. Toby and Mr. Roston, well-known designers, Ed is now free-lancing on his own. Main ambition: to paint a good painting! **Robert E. Frank.** Bob is a quiet fellow who believes actions speak louder than words. His grades speak for him. A member of ODP, he is half of the Herr-Frank combination. You will always find them sitting together doing what has to be done for the next week. Bob is an ardent bowler. **Alexander D. Frascella.** Alert and aggressive, Al is our idea of a good, practical engineer. His B.M.E. degree is merely a restatement of an accomplished fact. Married, and a proud papa, he somehow found the time to be a member of PSO and the night branch of the ASME. **Jacob P. Friedman.** This dynamic ME keeps his class in laughs, and certain instructors in anguish. J.P. (or Pincus) has twice been President of the Student Council and ditto as Chairman of Class Night. In his spare time he is a member of TBP and Ruler of LSK. This loveable personality is a good dresser, public speaker, BRBer, amateur thespian, politician, and all-around swell fellow.

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Lester H. Gabrilowitz. Better known as Gabby, he has a sparkling personality and a keen interest in sports and a certain girl. An active member of the ASCE, he served as chairman of the program and social committee. He was a member of the C.E. volleyball team that won the intramural volleyball tournament three years in succession. **Charles A. Gallaer.** Charlie really hasn't devoted much time to school. It seems that when everyone else was working at completing reports and assignments to hand in, he was just reading his newspaper or magazine. A member of TBP and PSO, he has also been active in the Student Council and ASME. **Ronald G. Gallie.** A draftsman during the day, this architecture student rides the subways back and forth to school each day. He served in the 106th Infantry division during the war. Entering in 1941, he didn't return until 1946. **Gerald M. Gardner.** Artist and class Bohemian, his artistic sketches and uninhibited remarks make class life pleasant indeed. Popular, and a sports enthusiast, he kept time with Ruthie Bowden, at the basketball games that is.

3

Aaron Garfinkel. Aaron is an unusually fine combination of politician and politician. He always had a pleasant greeting or subtle and well-couched compliment. A vigorous worker, under stress (i.e. the last week of the semester), and a magnanimous friend, his motto is "Count me in" and he's a sucker for knishes and egg creams. **Craig M. Garretson.** Craig is a chap who seldom works himself hard, unless called upon, and then he is capable of rendering the unnecessary rejoinder. In a consistent and unassuming manner, he continually received tens on Prof. Sherman's problems. **George J. Gerhard.** George, the one man basketball and softball team of the EE's, is a well rounded athlete. His serious moments are spent with music and bridge. **Cornelia L. Gill.** Look at Lee and giggle. Try it! In two seconds, you will have everyone joining in the contagious bubbling laughter that means Cornelia is at it again. But all of Lee isn't light-hearted.

1 **Guy Giordano.** It's getting to the point where everyone is saying "Guy is my-y-y engineer." This is because of Guy's exceptional ability in structural design. Guy claims to have a knack with those down to earth problems. So, if you should ever have a down to earth problem, such as a house drain, then Giordano is your engineer. **Henry Gitterman.** A quiet fellow, Henry has earned the respect of all the members of his ChE section. His main accomplishment is his discovery of a most versatile finagle factor, which, according to Henry, has enabled him to solve any problem ever presented to him. **Mario M. Giuriceo.** His greatest ambition is to be a world travelling photographer, but he doubts his chances. He expects to find his Wuthering Heights before his temporal displacement, and he probably will, judging from the quality of his work.
Ernest Goldberg. A man of distinction in the engineering school, Ernie got a BA in math at Brooklyn College and then decided to switch to Electrical Engineering. He picked EE because it was a snap course (it says here).

2 **Solomon Goldberg.** Sol is an ex-GI who is trying to advance to $25,000 per week. A man who has no unusual ambitions, he is content to spend his time with his charming wife and their lovely child. A resident of Brooklyn, he travels to school daily by his favorite mode of transportation—ox cart. **Mildred Goldstein.** Mildred is one girl you have to look up to—she's tall, that is. This is a handicap when she comes rushing into class late, but her work should help her make up for it, for it is among the best in the class. **Murray A. Goldstein.** Our curly headed boy is always popping up with new ideas. The latest is a radiant heater that can also double as a barbecue for a weenie roast. That's what happens to architects who go haywire, and become industrial designers. **George Goltsos.** Looking more like a cherub-faced sophomore than a man who has been married sixteen years, and at CU for thirteen, George is an easy-going perpetually smiling young man, with a deep, quiet mania for trout fishing. George spends the days dodging trains as a board of transportation engineer.

3 **Jack Gonick.** Jack is the Bronx's contribution to Cooper. Many's the time Jack had the whole class in stitches with his stories and pantomine skits. He is a comedian turned engineer. A Kaiser is his pride and joy, requiring much of his elbow grease to keep it shining. **Seymour Gordon.** One of the five reasons why the EE basketball team did so well in the intramural tournament, by not finishing last. Besides this he is an eagle eye on a pool table as well as on the basketball court. **Ben J. Graham.** Neatness personified, Benny turns in reports and drawings that make his instructors beam with joy and his fellow students green with envy. He carries this meticulousness over into everything that he does. He was one of the founding members of SKT and was elected to be its Archon, in his senior year. **James J. Graham.** Jim, the class goodwill man, is always willing and happy to get the class to operate as a harmonious unit. He was always "Jim on the spot" to accept the arduous duties of class representative. Presently a junior process engineer in the petroleum field, Jim is going for a master's at Brooklyn Poly. He manages to act as Grand-master of PSO in his spare time.

1 **Ira Grayboff.** He believes sex comes after five, and expounds his ideas in a continuous flow. His bow ties and sport jackets form the man, and his theories on life are informing. When asked whether or not he thought night baseball will replace sex, he said, "Haell Noo!" Music is his hobby, too. **Murray Greenberg.** Murray, of the sly smile and subtle humor, is former Associate Editor of the Pioneer and member of Lambda Tau. The Grieve is married to Pearl Katz, former Art School big wheel. He and school chum Becker are noted for their political arguments, which stopped for nothing but tests. **Daniel Gross.** Danny Boy might well be titled Mr. Cooper Union of '49. He is one of the most well liked and popular fellows of the class, a member of Tau Beta Pi, and a rabid sports enthusiast. He was a member of the AA, and a participant on most of the unvictorious intramural teams. **Alexander Grove.** Alex attributes his graduation to the tolerance of the faculty, a love of masochism, and an enormous amount of understanding and help from his wife. A lover of culture, he intends to spend more time on the finer things of life, and with his wife. Al also paints and studies the accordion.

2 **Jeannette M. Gruber.** Jeannette is a person with great natural artistic ability who hails from the island of Manhattan. One of our more esthetic students, she is a true patron of the arts with a sincere interest in people. **Mildred A. Gruber.** Millie is the girl who keeps the bulletin board covered with notes from her large circle of friends. She is very active in school, and is always serving on one committee or another. This petite mam'selle nevertheless has time to be a fashion artist, make her own clothes, and keep up with her school work. She has her eyes on a CU engineer. **George Gumas.** George, the quietest guy in class, is well known for his antics, especially "Civilization" antics. A close associate of Jagerman, the only excuse for his not having built his own television set is his love for his EE option, power. **William L. Haberman.** This illustrious member of Tau Beta Pi is noted for his most distinguished soup strainer. Bill's methodical and accurate approach to engineering has resulted in his unanimous election as permanent squad foreman.

3 **Mildred A. Hafner.** This good looking Brooklyn lass is a very popular night artist, but don't crowd around boys; she belongs to another. Her heart is pledged, as the saying goes, "Millie is already mated." She has a flair for her work, and should be very successful in her chosen field of endeavor. **Kurt P. Halbert.** Full of ambition and anxious to consummate the success for which he is destined, Kurt ranks at the head of the day ME class. Intensely interested in Tau Beta Pi, in which he is an officer, the professor is noted for his affliction to wine, women, and the New Yorker. **Walter E. Harasek.** Quiet, well liked, Walt is an ardent Be-Bop fan, and would like nothing better than to play his trumpet for "Dizzy" Gillespie. However it looks like he is destined to end up as an artist, and Wally is the art field's gain and "Dizzy's" loss. **Leon Hattem.** His classmates nicknamed him Pasha, and it stuck. His ear for music has made itself felt down on the lunchroom piano. Nobody can play off-key quite the way he does. Handball is his game, and he won in the doubles tournament. He was also a star outfielder for the class softball team.

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Frank Havlik. Almost any time of the day or night one can hear the reassuring rat-tat-tat as Frank opens fire on students or instructors who are so foolhardy as to step out of line. He commutes from his arsenal somewhere on Long Island where they test water pistols. Greatest ambition is to open another road house in Tibet. **Melbourne J. Hellstrom.** West New York's gift to Cooper is known by his high pitched detailed whistling rendition of the classics. Tau Beta Pi has not been able to detract all of the senior class's top brain's time from intramurals, Glee Club, or from operating the best amateur station on the east coast, W20ZQ. **Charles A. Herr.** Charlie is the other half of the "You give us—we'll do it" concern of Frank and Herr. A member of ODP, and married, Charlie is looking forward to a bright future. **Carl Herrforth.** "Vission in Lather"—this is Carl, who posed in photography class for the man in the shaving advertisement. He is now art editor of a leading national magazine.

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Bernard H. Hillman. This affable ME was one of the earliest members of his class to succumb to the marital instinct. Known for his hearty laugh, he is quick on the draw with a witty phrase or three. Bernie still finds time to help produce Cables and is now Senior Class Editor. As a charter member of BRB, that sterling group of erudite Cooperites, he rates as class live wire. **Ralph P. Hinchman.** Ralph was forever dashing to this party, that show, up to Westchester or Connecticut and back to Manhattan, or trailing a cocktail shaker to a concert. For all this, he managed to work hard and acquire a collection of A's and fine photographs. **George Hirsch.** George is a member of Tau Beta Pi, and the ASME. A married man, he trekked homeward every night after school via the Sixth Avenue. He will miss most his cross town walks to the subway with Hans Joseph, and the apples he shared with Hans on the train. He is looking forward to his master's. **Henry Hirsch.** Hank is a man of distinction, spelled BRB, a veteran of six years in LSK and on the Pioneer (Editor Emeritus) including a couple of years off for the USN. A man's man, his interests are football, baseball, bowling, and McSorley's. Hank has recently taken down all the pin-ups in his room, all but one that is. He is currently engaged to Henrietta but he hopes to end that soon—by marrying her.

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Stanley Hirsch. Very sports minded, Stan was manager of the intramural volleyball tourney, active in all intramurals, Treasurer of the A.A. and a member of AMS fraternity. In between all this he managed a little time for chemical engineering. **Harry Hochstadt.** Harry, the genius of the ChE class, holder of the calculus medal, is president of Tau Beta Pi. A popular version of a differential equation, he was vice-president of the Math Society and treasurer of the Chess Club. **Robert M. Hockenjos.** One of the many married men among the night engineers, Hock used to complain vigorously of the injustice to his wife. Still, after a night spent on a lab report, instead of with his wife, and then a day at his designer's job for Consolidated Edison, Hock could still retain his helpful, good humored disposition, favoring his troubles, at most, with a wry smile. **William P. Hoest.** Bill, blond, quiet, and married, is one of the miracle men of Cooper. Besides school at night he managed to play with the varsity basketball team and receive his major "C."

1 **William M. Honig.** A member of the Boxer, Comninos, Honig triumvirate, he can be seen plodding around the school in a fog looking for something. When he receives his diploma he will probably say, "Is this what I have been looking for?" **Frederick L. Horn.** Winner of the school's "Player of the Year" award. Fred is an outstanding athlete. Racing team captain of the Yacht Club, he also played varsity basketball and was active in intramurals. For a little guy, this particular ChE has plenty of drive. **Leonard Horowitz.** Len, a night ME, started his Cooper career way back in 1937. However before he reached his senior year, he took time out to serve Uncle Sam, and then before returning to the night school, he married and honeymooned, and then took a year of day refresher courses, starring in intramural basketball and handball, and receiving an award for the latter. **Frederick V. Housley.** Quiet, friendly, Fred sets the criteria for good conduct as well as drafting excellence. He's engaged, she's lovely, he uses Ponds. He is a member of Cooper's Intercollegiate Bowling Team.

2 **Richard A. Hubsch.** One of the most enthusiastic jazz addicts in his class, Dick sifts his jazz collection one minute, plays a guitar or sings a mean folk song the next. He may top the field in illustration and certainly in advertising where his talent abounds. **Git L. Huie.** Our bright light in abstract painting, Phil has good inspiration in his pretty wife and could not help painting an extra picture or two of her. Will he ever give the secret of Lobster Cantonese away or tell who spilled McSorley's ale into the Dektol bottle? **Logan J. Ingram.** King of the Ball in '47, he has acquired himself a queen. He is very sports conscious and is now vice-president of the senior class. He was a member of the Rifle Team, and very active in intramurals. His bridge playing in some ways disagrees with Culbertson's, but it certainly works. **Samuel J. Ippolito.** Corona's gift to CU, Sam impresses one as the "deep-running, still water" type. He has the knack of keeping his mouth shut at the right times and saying something worthwhile when he opens it. Army service has delayed his schooling, but watch Sam's quick progress as an engineer after graduation.

3 **Russell Izzo.** Russ, a rather recent father, has slaved through CU for a mere 6 years, and finally graduated, despite the demands of his numerous relatives, whose understandable insistence for his presence and services often left him with his work undone. However his classmates never let him down. **Eugene Jaffe.** Jaffe wishes to take this opportunity to inform everyone that he has been falsely accused of punctuality. We were shocked, of course, to learn of this since Gene has always given the impression of being prompt and exact. He accounted for the deception by wearing a checked suit, and keeping his brief-case shined. **David Jagerman.** Cooper's only Esperanto enthusiast, Dave is well fitted to give math lectures to the Math Department. This Nikolas' boy spends all of his spare time on television, photography, and frankfurters and sauerkraut. **Seymour Janowsky.** Sy was another of the stalwarts of the basketball and softball teams. After graduation he will go into hibernation in order to avoid the long arm of Uncle Sam's Army. Just whisper the word "pinochle" though, and he will come out of hiding.

1 **Edwin S. Jaskot.** A quiet, brilliant, hard working gentleman, liked by his classmates, Ed is one of the most conscientious men in the ChE group. He is noted for his consistent thoroughness in all of his work. Ed plans a master's at Brooklyn Poly and eventually a PhD. **Max J. Johl.** Silent, imperturbable John does his work quietly and surprisingly efficiently. He is a frater in PSO, and was a member of the IRE, and the AIEE. As a matter of fact he is a past Vice-president of the AIEE. **Hans H. Joseph.** Hans, a Tau Beta Pi man, regrets nothing about the seven years spent in Cooper, but wishes he had more time to spend with his child, and his hobbies. He is going to miss his nightly apple sharing with George Hirsch on the subway ride home, and the stares of their fellow riders as they attempted to break the apples. **Frank J. Kacerow.** To Frank should go an extra measure of honor. Few men in his position have the boldness to attempt such a program (and he is not a growing boy like the rest of us), and fewer have succeeded. His maxim is, "If you don't know—ask!!"

2 **Milton Kalish.** Milt, a member of Tau Beta Pi, has a career in air conditioning and refrigeration well under way, never-the-less maintains outside interests in painting and cartooning. However the foremost problem in his household is his daughter's career. **Stanley Kaplan.** Stan is a very politically conscious day artist. He was a member of the YPA and was known for his well founded and interesting discourses on the cause of liberalism. Despite his outside interests he found time to do justice to his schoolwork. **Irving Karsh.** Babe is one of our minor geniuses who likes to play with integrals in his spare time. A stalwart committeeman of the AVC, he does his serious bit to make ours a better world. A rugged individualist and man of principles, the Babe is never known to waver once his mind is made up. **William J. Kastelman.** A snap of the fingers and Bill is here. Vice-prior of AMS fraternity, Bill, as are most of the ChE's, is an ardent bridge fiend. The youngest member of his section, he is keeping his head up among the grizzled veterans.

3 **Alex Katz.** One of the backbones of the day art school basketball team throughout his school career, Ally is eagerly awaiting graduation for obvious reasons. Tall, dark, and handsome, he has the ability to go places. **Sheldon H. Katz.** Bemoustached and bepiped, Shel is well experienced in fixing any kind of election. But as a member of the Prestidigitorial Society, this Tom Mooney Hall boy is best stayed away from when running any kind of game of chance. Shel, as secretary of AVC, hopes to become politically active to promote liberalism. **George Kaufman.** Firm in his belief that engineers too could paint, George and Herb Wagner organized the "Art by Engineers" exhibit. President of the AIChE, chairman of the senior jewelry committee, member of the Annual Dance and Senior Prom committees, George is quite a versatile fellow. **Cornelius T. Kilminster.** Corny is the strong silent type. A nite ME who conscientiously did his work, he found just enough extra time to join the ASME, though his time was already pretty well divided between his job, school, homework and occasionally sleep.

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George K. Klausner. An advanced case of bridgitis, George is one of the bright lights of his ChE class. A very popular and brilliant student, George should go far in his chosen profession. **Arthur H. Klein.** K-square claims that he knows more bad jokes than Mr. Straus, which is well believed. Married to a former Cooperite, Charlotte Schnapp, K-square has been a live wire in his section by reactivating the AIChE reception and having been a Feature Editor of the Pioneer, a member of Lambda Tau, and what not. **Martin E. Klein.** Marty is noted for his atrocious sense of humor. A father of one child, he is a camera enthusiast, and used his photographic talents to make copies of lab reports, etc. This born misleader of men has earned a major letter on the Rifle Club. He is trying to promote some big business with cathode ray tubes. **Harold L. Klem.** If he were a sailor Hal would have a girl in every port; as it is, he just utilizes the immediate area for variety in the female sex. Hal also puts his aggressive tendencies to use in the business world, having been for the past few years an excellent renderer, layout artist, assistant art director in various agencies around town.

Richard E. Kline. Dick, a hardworking night ME, intends to sleep for one month straight after graduation. He then intends to have his wife introduce him to his son, and he will then start to enjoy life. Some day he intends to own his own home, completely paid for. **Ludwig Klinger.** One of those conscientious people, Ludwig, though he had to work during the day, attended Cooper at night in order to obtain an education and a degree in Electrical Engineering. His efforts were divided between his job and his education so that he had time for little else. **Emanuel Klotzko.** Manny is a man who believes he is destined to rise in this world, which may or may not explain his job with the Otis Elevator Co. At school, Manny is a good-natured, sincere student with a blunt curiosity which is the bane of his instructors. Since his discharge from the Army he has acquired a wife, a baby, and a new Chevvy. **Robert S. Komarow.** Hotshot, as he is affectionately known, is one of the first men to graduate from Cooper in only three years. He became manager of the Fencing Team so that he could protect himself after tooting his clarinet and saxophone in the school orchestra. For job insurance, he is learning farming in Connecticut on weekends.

Doris L. Korosy. A decorative arts student, small petite Doris is known as a terrific artist and is destined to fame. Her work shows directness and purpose. She commutes to school daily on that city landmark, the Third Avenue El. **Stewart M. Krakauer.** Stew is a nice, quiet, easy going young man who started CU in 1940, left to serve in the Signal Corps, and then returned to complete his work in the same quiet, efficient manner. When not engrossed in his studies, or his outside work with radio transmitters, he delves into the fine arts, especially classical and folk music. **Calvin Lader.** This ambitious young art student attends NYU during the day, and upon graduation from both schools may teach art. Cal says he'd be a good teacher if he learns as much as the students he teaches already know. **Herbert M. Learner.** Entering Cooper Union as a holder of the Schweinberg and State Scholarships, Hot Rock Herb soon became a luke warm pebble, when his interests became diverted to the presidency of the P-cubed.

Gloria M. Lebolt. Gloria is engaged to Al Martin, and it is fervently hoped by the entire class that his muscles and talent are at least equal to hers. She is a fine arts student who hails from our fair city, and she is well liked by those who know her. **John W. Lee.** John is a very ambitious nite architectural student, as he already possesses a degree in economics, and is aiming for a degree in architecture. He is the very happy husband of Betty Jeane Lee, a Cooper grad of last year. **Harold G. Lerner.** The youngest man in the class and one of two EE's to graduate in six years, Hal is a man of firm principles who would rather hold no job at all than work at one he does not like. Despite this, he has been secretary of the AIEE for three consecutive years and has worked for the Navy and the NYU Dept. of Meteorology. **William Levine.** You may not discover Bill's picture, as he shaved for it. He is the NCE's one-man debating team, and goes by the motto "Anytime, anywhere, any place, or any attitude." He has an intense interest in his field and seemingly has devoted his life to it.

Martin Levitsky. Marty is a guy who looks more like an art director than any art director we've ever seen. His favorite get-up includes glasses and either a leather or a corduroy jacket. This Brooklyn lad is happily married. Marty, oh-boy, is an expert strap-hanger in the subway. **Victor Liebowitz.** Vic is one of the happy-go-lucky fellows that made it possible for this book to come out. Likeable, laughable, and a very good audience, he has willingly taken much time from his studies and classes to act as Art Editor for the Cable. As a reward for his services he was allowed to purchase an Ex Post Facto key. **Arthur M. Liebschutz.** One whose lab reports were a "source" of constant joy to those in need of passing grades (nothing higher), Artie is setting up house in Manhattan and is now looking for a healthy, amiable companion for yeoman service. Artistic inclinations not objectionable, call NA 8-4511 after 7. **William C. Lojahn.** Bill is a draftsman extraordinaire, who has designs on being a designer. Though he is married, he nevertheless risks his very life and limb, by travelling to and from school via the "El."

Jo Alice Lowrey. Jo, a lovely and lively popular day artist, is married to an anthropology student, and she now takes great pleasure in telling Mr. Caldiero off. She came from out of town for the express purpose of attending dear old Cooper Union. **Benjamin J. Luberoff.** With a wife like Renee, it is difficult to see how Ben has had the time to accomplish all that he has while at Cooper. Chairman of the AVC, and Associate Editor of the Cable, Ben has also been President of the Camera Club, and is Chairman of the Student-Faculty Liaison Committee. **Frank J. Magro.** Frank is an artist in a dilemma. He leads a very hard life, but he can't, for the life of him, decide whether he prefers fencing to lettering, or lettering to fencing. He whiles away the hours on the subway, travelling to and from Astoria, pondering this problem. **Franklin L. Malchman.** Frank is another of the EE's who is certainly not sorry to see June 1949 roll around finally. Frank never said much; why talk when there is work to be done?

1 **Myron M. Manes.** Mike says he takes things very slow and easy in the Unit Ops Lab except when he is foreman. A member of the Yacht Club and an LSK brother, he took over as Cable Business Manager this year. **Milton D. Marder.** A walking chess set, Milty seeks his mate at Cooper. President of the Chess Club, Captain of the Chess Team (he likes chess), circulation manager of the Pioneer, treasurer of AMS, and a member of Tau Beta Pi. Milt's life at Cooper has never been dull. **Sol Marenberg.** Sol is the CE's gift to the world. He is noted for his sartorial splendor; and girls he is a bachelor. Among his attributes were his steadiness, unpretentious air, and his sober understanding of human frailties. **Gilbert H. Marin.** Gil is the tall man of the basketball team. He is extremely conscientious, and his hobby is collecting beautiful women. Before the basketball team took him away, he was Sports Editor of the Pioneer, and wrote an entertaining "Warming the Bench." He is a former AA President, and belongs to Lambda Tau.

2 **Albert Martin.** No one can quite put into words that sort of reverence towards designing expressed by Al when he says "Yeah, Architecture." He is engaged now, so that the only hope we can offer is to say knowingly, "Yeah, Women." Al's ambition is—"Yeah, Architecture." **Eugene Martinez.** Pancho is quite a kid. He claims to be a fine upstanding, intelligent, honest, humorous, good-looking, studious, conscientious, friendly, cheerful, thrifty, healthy, and sweet young man. Sounds like a Boy Scout to me. **Kenneth G. McEwan.** Mac has been the sparkplug of the night branch of ASME and any other activity that needed time and attention. He possesses a degree in education and teaches in a vocational high school. A good teacher as well as a good student, he will use his BME to further his ambition to teach engineering. **Marian L. Meadows.** If you see a tall girl in the corridors, it is sweet and unassuming Marian. Her textile designs reveal a marvelous sense of color and texture. She is destined to become one of America's greatest textile designers. She is possessor of Cooper's most beautiful blond hair.

3 **Emanuel Mevorah.** "Chee, what a guy!"—trustworthy, helpful, cheerful and clean, even though he does smoke Kools. Having heard his classic statement, "But are you allowed to do it, even though you don't have to do it?" we respect him as a person really devoted to his work as well as the class's work **Donald L. Miller.** Partner in the Urban-Miller domain, Don was seen tearing back to the "castle" with those menu blues or balancing a realistic illustration and pile of jazz records on a book of Plato's dialogues, when he was not waiting at the mailbox. **Murray Miller.** Among Murray's other achievements is his ability to maintain calm, order and silence in a certain architectural class. He is a born leader and can drown out anyone who doubts the validity of that statement. His elucidation of "How it was in England" has added to the class's culture. **Sheldon J. Miller.** Every deck of cards has its joker, and Spindle-head certainly was ours. Whenever finals rolled around his favorite expression "This union is not for me," could be heard echoing through the halls.

4 **Vincent M. Milone.** This impression about Vince working so hard is really a hoax. We know for a fact he has an atomic duplicate of himself that does all the work while he spends his time in bed. The guy that really is him is the one with the brown corduroy jacket that is always eating apples. **Andrew Mitropoulos.** We are glad to report that the rumor about good artists being quiet untalkative people is entirely unfounded. Andy is one of our best architects, and of course the loudest guy in class. That is how it is with these artists, they do not know when to stop. He says those phone calls are from his wife. **Howard S. Molk.** Puny is the one-time treasurer of the AP who retired in his senior year to devote more time to his position as treasurer-secretary of the P-cubed. His classmates feel that Howie will go far in life since he learned to master the slide rule and Shel Miller. **Edith Mortman.** Edie is a fair Brooklyn lass who ventured forth to see what she could learn about the field of Fine Arts here to dear old Cooper Union. Even if she did not learn everything, at least she had good time and made a lot of friends.

5 **George H. Mueller.** Big George's stature, both physical and intellectual, is as well known around Cooper as his cheerfulness and friendliness. If ability, perspective and respect of his fellow men are requisites for success, George is well on his way to a bright future. **Vivian Mutchnick.** This pert blue-eyed miss has a passion for lettering, political action and trips to Green Camp, not to mention horses—Ah Wyoming! Ah Wilderness! **Norman L. Naidish.** Norman's degree is a supplement to his practical experience as a tool designer. Well fortified with ingenuity he makes a career of improving production techniques. Norm hails from out Brooklyn way, and is one of the happily married men of the class. **Leonard M. Naphtali.** Better late than never is Lenny's philosophy. Knowing as many facts as an encyclopedia he is nature's gift to nervous teachers. Lenny is an LSK member and you can always depend on his wit for a gag or on his knowledge for technical dissertations. He looks more like Prof. Peterson than Prof. Peterson does.

6 **Walter Nazarewicz.** "Foul Ball" Nazarewicz (known as Malted Nazarrewqcbxz in the Pioneer) is Cooper's gift to the basketball court and has been Captain of the varsity for two years. Walt, one of the most popular fellows in the class, is an all around athlete and can keep up on the book learning too. **Edward C. Norman.** Ed, being a power man, has solid principles: he refuses to go out with girls living more than six blocks from his home. This policy was arrived at after his engagement to a local young lady. This former President of ODP spends a lot of his spare time plotting curves, with assistance. **Nancy Norwood.** Nancy spent her evenings, in case anyone was wondering, learning what she could about the decorative arts in the hallowed halls of CU. During the daytime she worked, and whatever time she had left over, she spent at her home in Forest Hills. **Frederick T. O'Driscoll.** Though his long, lanky form is most often found draped over one of the seats in the back row, Fred is one of the class's most wide awake students. Just sit back and let Fred answer it and everything will be all right. Fred played varsity basketball, and intramurals for ODP.

1 **Mary O'Keefe.** Mary's a grand ol' name, but she's a grand gal. As the only girl in class 3C2 she has become an integral part of the school's curriculum. Her fuzzy top and cute smile has kept quite busy during her three years stay at Cooper and photographers galore have sought after her photographic cuteness. **Ernest Oppenheimer.** The "Quiet Look" might be Ernie's nickname, but do not let looks fool you, he is full of the devil in his own manner. This helpful ME has got brains, talent, a sharp photographic eye and about everything else but hair. Oppie is the Photo Editor of the Cable and also made Tau Beta Pi. **Agatino Panasci.** Tino's black moustache gives him a very chic appearance and helps in his career with the cute brunette. Tino also has a '41 Pontiac and an extra room available. He has long been famous for his Christmas parties, and from the look in his eye he plans to develop this further. **Lucy Papazian.** Pert, small Lucy majored in fine arts during her stay at Cooper. She and John are another one of those pairs seen around the school halls.

2 **Morris Papish.** Poise and level-headedness are only two of his many assets. The ready wit and suaveness of this past President of AMS should stand him in good stead at all times. He is experienced in chemical plant design, and he intends to take a master's degree at Columbia. **Donald J. Pearlman.** Just ask Donnie about Shirley, to whom he is practically engaged. An LSK brother, Don was treasurer of the AA and is a member of the AIChE. The Navy lost a good potential ETM when Don accepted his discharge and returned to Cooper, as everybody in school will testify. **Joseph A. Pellatt.** Joe is an artist who is also a fiend at flying, being a member of the Naval Air Reserve. Besides wielding a mean brush he plays a good game of basketball with the art school intramural team. **Anthony Peranio.** "First let's get to the philosophy of the Thing" is Tony's watchword. Tony, an ex-radio officer, is willing to fix your radio, run a political rally, or serenade you with his guitar at the slightest provocation. He was student band leader and chairman of the YPCA, and managed to cap a courtship by marriage in his senior year.

3 **Norman L. Perry.** One of the ChE's most ardent bridge devotees, cherubic Norm could be heard round the room calling, "A fourth for bridge". Norm was also co-editor of the Pioneer, recording secretary of Lambda Krud, and has been active in intramural sports. **Charles H. Peterson.** An outstanding ChE student, Charlie won the prize for the best record in the third year chemical engineering class. A member of Tau Beta Pi, he was also president of the Debating Society, secretary of the AIChE, and vice president of the Dancing Club. **Joseph A. Phelan.** EE oo oo—A spectacular vernacular is voiced by Joe at any compulsion and his Be Bopian appreciation ejaculates itself into his tete-a-tetes. He is righteous as a peanut whistle. His house in Brooklyn has been the haven for many a party, but now the only party he is interested in is the other half, Winnie. **Joseph R. Pniewski.** Joe, who has aspirations on an architectural career, applies himself very seriously to his work. The boy really has talent too, as in his first year he won the sculpture prize, and in his second, the architectural prize. A Brooklyn lad, he spent four and a half years in the service.

1 **Milton Rabinowitz.** Milt's keen analytical mind and studious concentration have raised him to a position where he is unanimously recognized as the class mathematician. Outside of mathematics, his well balanced interests include radio, music, and bike riding. Like a true savant, he takes his women in moderation. **Stanley G. Reed.** Thoughtful Stan is noted for his ability to quote verbatim from the shelf of reference books he carries perpetually in his back pocket. Stan, a quiet Casanova, has only one thought to leave behind, "More beer in every class". **Carmen I. Rodriguez.** Little Carmen is one of the cutest senoritas to be seen on the B.M.T. in a long time. She does the rhumba like she does her paintings, lots of the right kind of movement. Her textile designs should be very popular. **Albert P. Rogers.** This night electrical engineer is another of the bright lights of the class. Al is a lad who divides his time between his job and school and finds time to do little else in school. A serious and conscientious worker he can always be counted on to turn in a job well done.

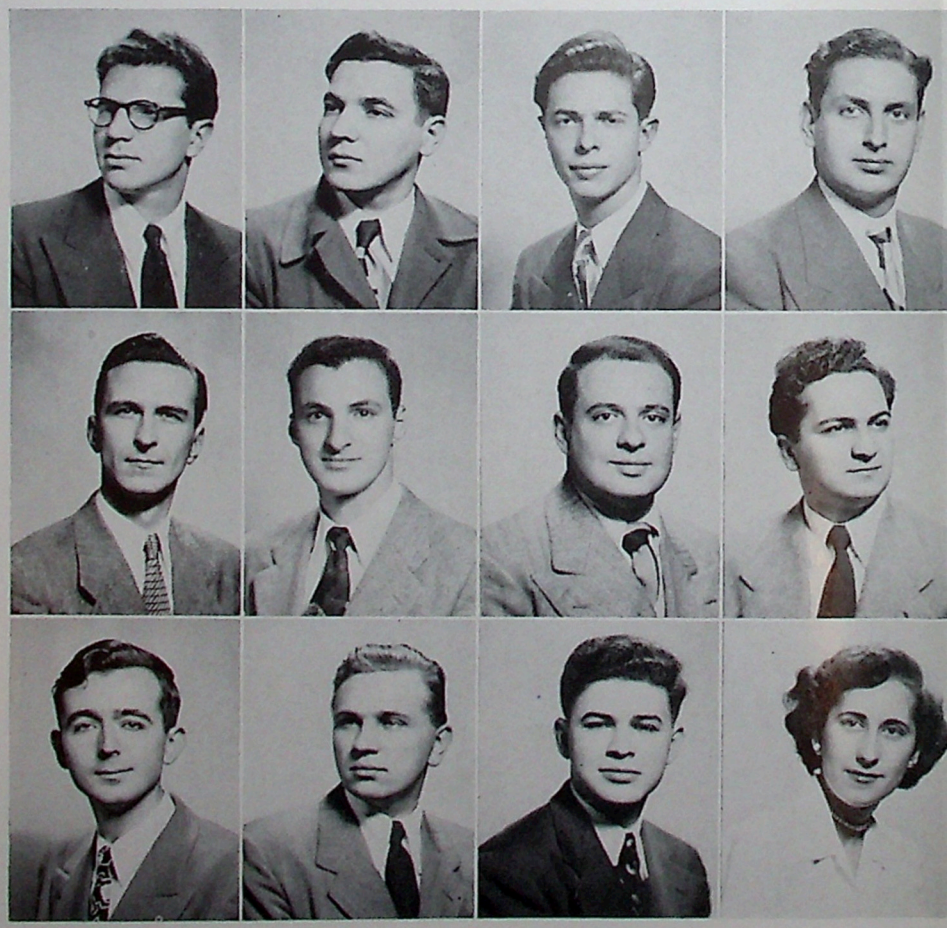
2 **Charles P. Rohmann.** Chuck was the hard-working president of the ASME during his senior year. As a result of his personal magnetism and persuasive abilities he made the year's meetings some of the best ever. Happy was also the star athlete of ODP, having participated in softball, basketball and bowling intramurals. **Fernando E. Rola.** Rollo is the young-looking man who turns out brightly individual pieces of art in his classes. Rollo sees his folks in Point Pleasant weekends, after trying to interest some brunette into accompanying him. With his Puerto Rican background, this commercial letterer does a mean rhumba. **Joseph S. Rosen.** Joe came to Cooper from Philadelphia, the city of brotherly love. He claims to have known Ben Franklin and helped him fly his kite. Joe's ambition as an industrial designer is to design bigger and better kites that people can go fly a. **Irving S. Rosner.** Irv, when taking time off from running AP, can be found at Tau Beta Pi, AIEE, AVC meetings and standing in the Mooney Hall chow line. Always busy, it is a wonder that he gets anything done at all, yet he is scholastically, extra-curricularly and socially at the top.

3 **Herbert H. Roth.** Herb is always the efficient man on any Tau Beta Pi committee. A leader at chow in Club 65, he is the first at EE lab reports (but who wouldn't be after six laboratories at Clemson). His outside hobbies are Trudy and music. **Meyer N. Roth.** Meyer comes all the way to dear old Cooper from all the way out in Far Rockaway. He travels to school either by car and subway, or, when he feels he is up on his luck or he purposely wants to get to class late, by the Long Island Railroad. **Gustave A. Rothmaler.** Gus is a good natured guy who willingly took on all the jobs given him by the ASME, ODP, and Yacht Club. The possessor of a fine bass voice, he is a natural with a bar or a barroom lament. His warped humor and passion for puns came to flower in the potted powerplant presented to Prof. Vopat at the annual ASME dinner. **Rhoda Rothstein.** Mom always has an abundance of energy. Meets all problems successfully, and she hopes she can cope with the double trouble she is longing for, namely a double bundle of joy, twins.

1 **Bernard Rothzeid.** Almost everyone knows that Bernie has "Ze most unbeliefable feet" in Cooper Union, but that's not all. As the girls will testify, he is the most big-hearted guy from the tip of his big toe to the top of his loveable head. We all know him as the good-natured MC of the little red door. **Ernest Rottman.** A solid citizen of the chemical engineering section, Ernest too, couldn't wait until graduation to get married. Don't blame him a bit. Before matrimony reared its ugly head Ernie was quite active on the Pioneer. **Eli A. Rubin.** This Tau Beta Pi man has been walking on air since meeting that certain girl. Nevertheless he has found time to be Editor-in-Chief of this Cable, and founder and first editor of the CE's Survey. He writes poetry in his spare time. Popular Eli is known as the class theoretician, and he is always helpful and friendly. "Don't worry about it" Eli. **Jack Rubin.** Jack is one of the Mooney Hall boys. Quiet and tall, he is hard and easy to spot. One of Jagerman's cohorts, he takes the credit for showing the Math Club boys how to build a television set.

2 **William J. Rup.** Bill is of a practical turn of mind, the more theory he can form into tangibles, the happier he is. Always genial and at ease, he gives the impression that Cooper agrees with him. This strap-hanger from Brooklyn is married, yet he found time to join the ASME. **Norman M. Sacks.** Norm is quite an active fellow and will be remembered for his persevering work as chairman of the Senior Prom Committee. An active intramural athlete and a member of AVC, curly haired Norm is an esthetic fellow and an indefatigable reader of the New Yorker. **Seymour M. Saidel.** Si, a commercial artist, is a very likeable fellow and a good friend to have. He works hard in the field with the hope of some day making good. With his talent and perseverance he should have no trouble getting to the top. **Emanuel Sarfaty.** Manny is the dynamic proponent of progress, and maker of weird music in the drawing room. He will always be affectionately remembered as our gadfly against laissez faire. He is a creative gent too; there's to be a brand new Sarfaty by graduation time.

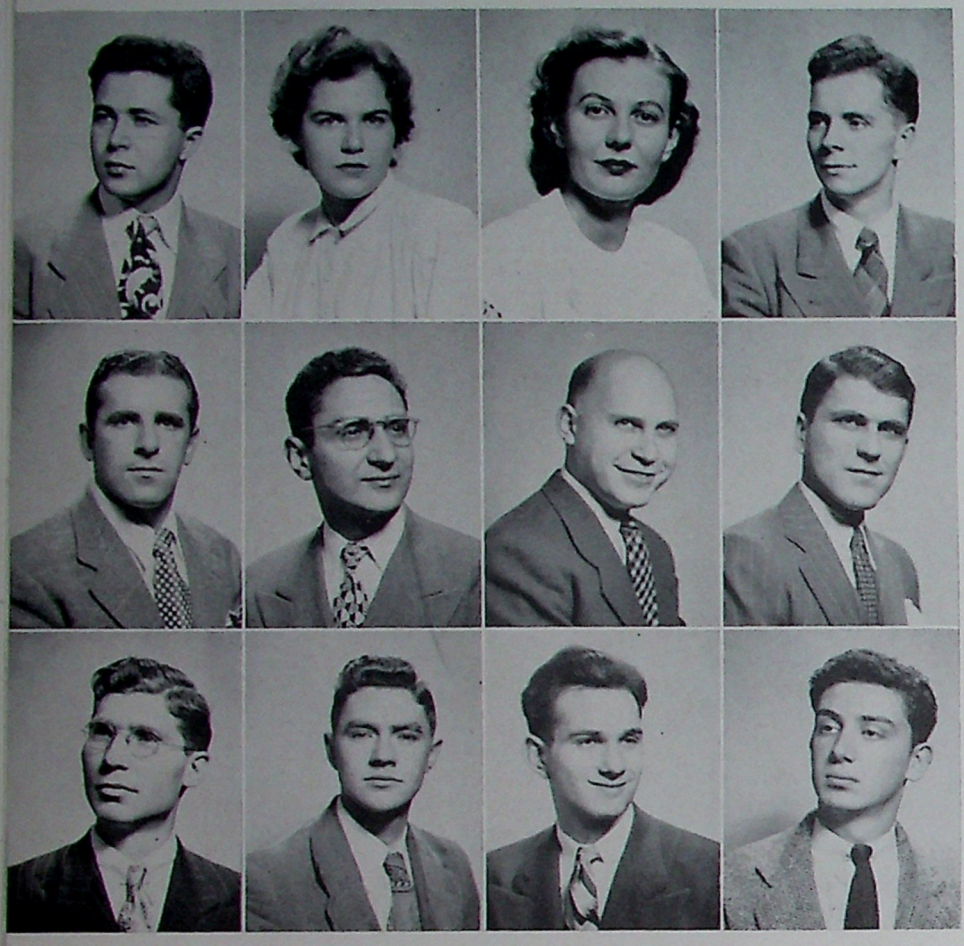
3 **Edgar J. Schmidt.** Ed is the class mathematician. On the Rifle Team, where he is co-captain, he has various aliases such as Happy Ed, Long Eddy, or the Doleful Dutchman. Ed may not always find time to do his homework, but he always finds time to worry about it. He will speak only when argued with. **Werner F. Schultze.** Werner has been going to Cooper since 1940, but took three years leave of absence at the behest of Uncle Sam. He is a fellow who does his work conscientiously and quietly. Between school and his job as assistant construction engineer he found time for little else. **Henry G. Schwartzberg.** "Teachers beware, Henry is here." Always smiling, Henry is quite a bright student. He was chairman of the AVC, on the Pioneer staff, and a Dramatic Club member. His work to better student-faculty relations has been both voluminous and productive. **Concetta A. Scutellaro.** Concetta is a night artist of the Fine Arts-Decorative Arts option. A talented girl, she is very popular and always willing to lend a helping hand. She should go places in her chosen field.



1 **John Seneres.** His cartoons look more like him than he does. Always ready with a smile and a good gag, he is liked by all. The New School has turned him into a philosopher and "Dr. Arnheim says—Bagels are sex symbols". For further information consult Lucy Papazian. A Cable artist, he has earned his Gold "C". **Herbert Shalat.** If Herb should grab you by the lapels and say, "I'm the guy—", believe him because he is the guy, the only person able to integrate lunch, bargains and S. Klein within half an hour. Despite all this, he shows great merits as an architect, and as a potential thespian. **Sol Shapiro.** Sol is one of the busier boys in school, having managed the Basketball team, been an LSK member, and a member of Tau Beta Pi, all concurrently. Besides this feat, he has managed to find a one and only whom we all know as Gloria. **Robert Sheridan.** Bob is well known for being the mainstay of extra-curricular activities at CU. Among the pies he has had his fingers in are the Cable, the Student Council of which he was President, the AA, and the ASME. The kid has a great personality which will soon fit him for a high position in his chosen field. He is also an LSKer.

2 **Bertram A. Sherman.** Bert claims the distinction of getting through by the skin of his teeth, of which he has two front. He subscribes 100% to the Boy Scout Law, and in addition he is handsome, charming and claims to have lovely eyes. He is also single. **Joseph E. Sidoti.** Joe has been quite an active fellow here at Cooper. He was Vice-President of the senior night class, Prelate of PSO, and a member of the Dance, Hiking, and Yachting Clubs. He likes to explore the Island with his auto, and has ambitions of exploring the Florida Keys in a 30 foot schooner. **Howard Silfin.** This dynamic builder of men, organizations, and log cabins is a top notch executive. Li'l Howie can be counted on for his laughs (he is in BRB too), a commanding thirst for the amber brew, and the right answers. He is in LSK. Some of his loves are the AA, Green Camp, the Rifle Club, and his pal HBH. **Lillian S. Silverberg.** Victim of Charney's humor, Finkle's attacks and Michel's moods, this neat Miss has more friends than a diamond mine, and will conquer the advertising field without armor or a sword.

3 **Charles J. Smith.** The smiling Irishman, as Smitty is known, has a smile for everyone, but especially Mary. Four years at Cooper Union has made Charlie a good friend of McSorley's. He holds down a job as a commercial artist. **Seymour D. Smith.** If you are searching for a keen organizer, a person always efficient and possessed with astute judgment, look for Si. Though appearing one day without a moustache, and the next day with, he is the epitome of stability. A member of Tau Beta Pi, and AIEE, he is graduating in the minimum time of six years. **Shirley Smith.** If you need anything from a pin to eraser to scissors, band-aids, aspirin or rubber cement it is sure to be found in Shirley's purse. A quiet girl and a sincere worker she should be successful in any undertaking. **Abraham Solnick.** Al is the class intellectual, and the last of the "French Philosophers". His favorite words are "Let us assume—". He is a steady worker who believes that post-graduate work should be offered to undergraduates, thereby enabling them to obtain two degrees simultaneously.



1 **Julian Spector.** Busy Speck can hardly be seen running from class to class, but he can't be missed at Student Council and AP meetings, nor when he swings the gavel at AIEE get-to-gethers. After ridding himself of the Navy twice, and after many loquacious encounters with his instructors, Julie is expected to go far in his chosen field. **Blanche Spiegelman.** She operates under the pen name of Boche Staats. She knows that she is good, and if you don't she will convince you in short order. This Brooklyn miss was long a popular lass in her day fine arts section. **Elfrieda E. Sprado.** Classical music doesn't make her a square, in fact she's to the contrary, so round, so firm, so easy on the draw. Yes Elfi is the kind of girl you'd like to bump into, and get to know. **Michael A. Spronck.** Mike is known for his antics and that devil in his eye. The only time anyone sees him quiet is when he is playing bridge, sleeping, or with Norma. He never lets an instructor say anything that is not clearly self-evident without challenging it.

2 **Angelo Stangas.** Angie, a married man with one child, has ambitions to be a policeman. A stocky weight lifter, if he can't lift it he can't draw it, and if he can't draw if he doesn't want to lift it. He won't be completely happy until he can lift his car with one hand. **Max Stark.** Max is a Brooklyn lad who spent his nights studying a bit of chemical engineering here at the hallowed halls of Cooper. A serious student, he should find no obstacles that can't be easily overcome on the road to success. **Sam Starr.** The Pioneer will never be the same without this perennial Editor Emeritus and heavy thinker. How this ex-Chancellor of Lambda Tau found time to marry a lovely Cooper Art girl, keep a full time job, act as President of his class and turn out bi-weekly philosophical articles is this year's mystery. **Harry R. Steinmuller.** Harry, a hard working night mechanical engineer, did not find school work exactly tough, but he certainly will be glad when June rolls around. He is a popular fellow and will be remembered for his friendliness.

3 **Henry W. Sterbenz.** Hank is a quiet guy who is willing to listen to anyone's troubles. It has long puzzled his classmates how it is possible for him to get any work done with his three kids running around forever wanting to know, "Why?" He also dabbles in model railroading and photography. **Dan R. Stewart.** We suppose that living in New Jersey would make anyone disgusted (we suppose that accounts for it). At any rate, Dan takes it in his stride, which is a long one, and keeps smiling. That's the sort of guy he is, always smiling. You'd be impressed too if you saw him smile, most instructors are. **Harold L. Suriff.** When Harry strolls into class bright and early you can almost feel an electrifying thrill in the air. It's sheer amazement! Despite this, he is probably one of the best men in architectural practice. As yet he hasn't told us what happened to his razor. The suspense is killing us. **Bernard Swedowsky.** Though he has a slow shuffled walk, Swede is definitely getting some place. A "What does it all mean?" theory has carried him through many a conversation with hardly a scratch. His love for old fashioned typefaces, upside-down figures, and subtle color are his trade marks, but his love for cats supersedes all.

1 **Harry Tanzer.** Harry is the typical American male of his age. Though he has worked hard for many years he still has the future ahead of him. If he hastens, who knows what bounds he might transcend (who believes it, if he does know it?). But virtue will out, and so did Harry. **Howard Tarshis.** As the only person with a built-in public address system, Howey is the most listened to person in class 3C2. Although he is quiet otherwise, he bears strong opinions, pro and con. At present he is the class's recruiting officer, pro-Army. **Herbert Teitelbaum.** With five years of Navy experience tucked under his belt, he is staying away from the water, and is at present a field engineer. He started at Cooper an even ten years ago, and when he gets out his chief ambition is just to keep on eating. **Albert Templeton.** Steady, reserved, quiet, dependable and possessor of a wonderful sense of humor sums up Al Templeton, 3C2's man of precision. The only thing that could make him come late would be a fire, and it did. "Too bad I didn't have my camera at the scene," he said.

2 **Arnold Tepfer.** Here is a man of high caliber. Taking power isn't enough, he devotes most of his time to his favorite pastime, aquatics. Not only did he instruct prospective Senior Life Savers, but he organized and performed at the Splash Parties. Despite being water-logged he received a medal for finishing first in the 10 mile swim. **Robert Thierry.** Now he can really tear his car apart, because he knows from his Internal Combustion Engines course why he is not getting 35 miles to the gallon. Bob spends the daylight hours as a tools and methods engineer. **Stephen A. Tomczyk.** Steve certainly has his future cut out for him. If he and Nancy fight so much now, what is it going to be like in the future? Possibly some kind soul will volunteer to act as a referee! A popular lad, he majored in fine arts. **Edmund G. Trunk.** Ed, as noted snipe skipper at Sea Cliff, joined the Navy to become a shellback in the Ancient Order of the Deep. As a result of this ODP's secretary's presence, the A-bomb at Bikini took off for worlds unknown. As Commodore of the Yacht Club, Ed can hardly wait to retire to the South Seas with a snipe.

3 **Joseph F. Turtil.** Big and tall, The Voice is known in CU by more than his vocal renditions. Since his return from Korea, Turdhill has maintained a high enough cumulative to become a Co-Editor of the Pioneer, demonstrate how to save drowning victims at splash parties, and become business manager of the BRB. **Wilfred O. Uhl.** Big, friendly Wilfred hails from the Bronx, and is proud of it. His solid conservative nature (Dewey was robbed) extends to his artistically perfect and never late reports. If things work out as planned, this AIEE member will some day be an electric motor production engineer. **John L. Urban.** Having hosteled through Europe he intends to return next fall to study. Whether he means to study advertising or women on bicycles remains to be seen. **William J. Van Buskirk.** Bill is the fellow with the name that has a Van in front of it and naturally has some Dutch in him. Quietly conscientious, he manages to turn out a good deal of work and is really having fun in his painting classes this year. He has ambitions toward an art director's chair, and his future is cut out for him.

1 **Jerry Vidibor.** Here is a little guy who will develop into something big. As photographer extraordinaire, he has been snapping his way into the light with wonderful results. His deep meditations have kept him interested in many things; he is at home in a dark room. Look for him as VDBR. **Melvin H. Wachspress.** Living in the sticks of the Dyre Ave. line presented his toughest problem in conquering Cooper. Mel, having been an Ensign in the Navy, hopes to follow in the footsteps of one of the electronic instructors. Leaving Cooper, Mel not only leaves fond memories behind, but his brother (an ME no less) as well. **Edwin R. Wagner.** Ed was a bit reserved, so it took a little time to find that he always had the right answer to a problem at the right time. A steady participant on every ME intramural team, Ed could always be counted on as a dependable man. **Herbert J. Wagner.** All you holders of AP cards will find the initials HJW familiar. In addition to being AP treasurer, Herb is an LSK member and was co-sponsor of the "Art by Engineer's" exhibit. His main ambition is to stop being reminded of his portrayal of Prof. Hopeless.

2 **Betty J. Waldman.** Betty holds the distinct honor of being voted Miss Brighton Line four weeks in succession by her ardent fellow passengers on the trip to and from Brooklyn. **Bert H. Wallace.** Bert, after six continuous years of evening-school, with no time and a half after 40 hours, longs to return to "normalcy" again. This hard working ME looks forward to spending more time with his wife and child. **Stanley H. Wapner.** Stan is one of the old timers in the day school, having started away back when. While in the Army he managed to tuck under his belt several semester's credit at Lehigh U. When he returned, to the day school, he managed to take some courses at night at Brooklyn Poly, and get married at the same time. **Robert Warshaw.** No problem or audience is too large or too small for the class lecturer and field engineer. He is way ahead of most; since he has reduced his lovelife to the one and only, the Warshaw concerto can always be clearly heard, even above the din of the Third Avenue Elevated.

3 **Sidney R. Wasserman.** Sid, the father of a growing son, is a successful display salesman. His gray hair presents him with a very distinguished appearance, which helps to hide his wild past. His past experience is varied, and includes one job as a barker at a side show. **Marvin M. Wax.** If you happen to hear a tap-tap tapping on a tool box, it is probably the parradiddle man of 3C2 keeping time with his ideas. Sculpture, sports, drums, and his specialty, lettering, all enter into this category and keep him quite busy. He still should change his name to Max Wax though. **Carl P. Weber.** Carl is always ready with, "Did you hear the one about—". An easy going, ever smiling, likeable guy with ambitions to be only moderately successful in whatever field of engineering he finds most to his liking, this Richmond Hill lad is married. **Herbert A. Weidner.** This shy retiring little devil is a second nature boy. He was manager of the Rifle Team during his junior year. If there is any book Herb has not read, it ain't been published. Very likeable but girl shy, so get to work, girls. Herb gulps his beer down very fast because he can't stand the taste.

1

Jack Weil. Jack is a quiet, sincere fellow and can always be counted on. Leading a peaceful life at Cooper, he managed to join the AIChE. He will go far in his chosen field. **Marilyn Weinberg.** Lovey will be remembered as the gal who cracked her gum. A very popular girl, she somehow got the reputation of getting high at parties and then becoming the life of them. She was on the Dramatic Club and the Cable Staff. **Donald H. Weinblatt.** "Juan Deinblot's" claim to distinction is that he is a Cooper student; what else? Editor Emeritus of the Pioneer, Chancellor of Lambda Tau, recipient of the silver "C", LSK brother, ad infinitum, Don has led rather an active life at Cooper. True to the ChE department, he authored their annual reception in his senior year. Brave man. **Lila S. Weintraub.** You've all heard of the tree that grew in Brooklyn, well, this is the girl who just didn't make it. It's not her fault though, for what she lacks in stature physically, she makes up with her dynamic and sincere personality. Oh yes, this girl does have etchings to show you.

2

Louis Weisbrot. Lou is chubby, married, and always trying to be funny. All he needs to make him happy is that it be good so that his wife will like it. Louie, from Brooklyn, has had experience in silk screen work, and would like to make blotters in his spare time. **Jack Weiss.** If you ever see George Washington on a postage stamp wearing a moustache, blame Jack, as he works in the Post Office. His two children are a constant source of joy to Jack and his wife. Between his job, school, and his children he has little time for anything else. **Leonard Weiss.** Like a human dynamo, Lenny (Zeus) speeds with unsurpassed frenzy into all that he does. "Look out, here comes Lenny!—Too late." He is a good man on canvas, tenor sax, Sara Vaughnian singing, and the female figure. **Morris Weiss.** Morris is a very happy fellow now that June has rolled around. At last he can say goodby to the old routine of lab reports, etc. that plague all electrical engineering students, especially night EEs. Though he didn't live too far from school, the long trek home every night after school seemed like a million miles.

3

Raymond R. Wells. Ray hails from way out in Lyndhurst, New Jersey. Aside from holding down a job as draftsman, Ray has done little else outside of his schoolwork. However his work was of a caliber that should stand him in good stead in any future job that he tries. **Richard J. Wengraf.** Dick is one of those CE's who ardently believes that the art of playing bridge should be a requisite for graduation. A member of the ASCE, and an avid magazine reader, Dick rounded out his extra-curricular activities by participating in intramural sports, and showing the rest of us how to really waltz. **Theopolus Williams.** Although he gives the name Theopolus, you may call him that at your own risk. Bill is the fellow who makes an attempt to creep into class at 7:30 and thinks he is not being noticed. His best excuse is that he has a charming wife, and a young son, and he can't bear to leave them when he goes home to supper. **Alfred A. Wimmer.** Al holds the distinction of spending 17 semesters in Cooper night without ever failing a subject. He enjoys nothing more than motorcycling with his girl friend. He is now an electronics engineer for the government, and in the past has been a corporation vice-president.

1 **William M. Wirfel, Jr.** Bill, though 5 feet 5 tall, should never be antagonized. He is flawless in dress, manner and speech. An organizer and captain of the Fencing Team, he is never caught napping on the defense. Famous is his reply to Coach Lucia's query about his absence at a practice, "Sir, I am an engineer!" **Jack J. Wolfman.** Tall, likeable Jay, switching gradually from an architect to a budding commercial artist, always has a funny quip on hand. Always serious and an industrious worker, he turns out very nice work. A father, his principle ambition is to be a good designer. **Jacob W. Wollins.** Jake is a night artist from Brooklyn who should some day make a name for himself in the field of decorative arts. **Daniel M. Woskoff.** Dan is a serious worker and talented artist. He is interested in dramatics, and before he switched from day to night school, he was a member of the Student Council. Dan is a man of principles, which had their beginnings in his Boy Scout career of many long years. He should reach the pinnacle of success.

2 **Nicholas W. Xikes.** Nick is a past President and currently Vice-President of ODP, and is a member of the AIEE. His ambition is to succeed in the field of engineering management. He was a Warrant Officer in the Air Forces, and President of Opportunities, Inc., and is currently employed by the Board of Transportation. **Sam Yeselson.** The man who needs the use of every finger to explain a point or a problem, he is a well informed authority on paints and finishes with an extensive background in this field. He is looking for his master's in paint chemistry at Brooklyn Poly. **David Young.** He takes the title for the best dressed man at CU, is quiet and good looking. As a cadre man in the army, he trained the men who won the war. Drinks to be sociable, and is he sociable! Dave takes to the co-eds in Washington, so he became Pioneer Business Manager to meet the RR bills. He is also an LSK and BRB man. **John Young.** John's success may be ascribed to his putting everything, but skiing and golf, after his school work. Thanks to the proximity of Cooper to Second Avenue, he learned to enjoy such local delicacies as pastrami sandwiches, knishes, and Halvah. He has forsaken McSorley's Ale for egg-creams.

3 **Henry R. Zabel.** Hank is hard working and industrious, and is well liked by all who know him. Zabe is quiet and a jazz fan of the Bop variety. This ex-machinist travels the subway, all the way from the hinterlands of the Bronx. **Martin J. Zenk.** Last in the class alphabetically, but certainly near the top in ability and personality, Marty is interested in the technical sales field, and will continue his studies at Columbia. He found time to be a member of the PSO fraternity. **Karl J. Zimmer.** Karl is the very enthusiastic president of the Newman Club, and past president of the ASME. On week-ends he finds time to visit his home in Farmingdale. Coming from out in the sticks he is naturally a good woodsman. A machine designer of the old German school, he is meticulous and a stickler for details—a sound man. **Fred W. Zinna.** Plaid shirt, dungarees and a battered hat roll themselves together to form 3C2's Brooklynesian philosopher. His definitions are obviously subtle and good work is fantastic to him. He can create masterpieces while lying on the floor or perching himself on top of a stool,

camera shy

Fred Alt
Morton Aronoff
Barbara E. Beal
Leonard Beck
Patricia Begg
Herman A. Berger
Harold Chazen
Sonia Chusit
Albert H. Coltin
Bayard G. Davis
Victor L. DeNigris
Leonard Dubitsky
James Evans
Edward F. Feldman
Mary U. Flaherty
Alfred Frankel
Maxine H. Gatewood
Paul Gelber
Michael A. Glancy
Edmund Glaser
Edward A. Hake
Bernard Harris
Cornelius F. Henderson
Wallace C. Hickman
Edward C. Homburger
Leon Horowitz
Anthony Imbesi
Jordan S. Kass
Muriel D. Kavanagh
John T. Kilmartin
Maxwell J. Lawrence
Catherine C. Levanis
Elizabeth Lippe
Irving M. Margulies
Camille P. Marinelli
Calvin J. McManus, Jr.
Roselyn Miller
George S. Millstein
William S. Moise
Leon Morrison
Benjamin Nedbor
Henry E. Niese
Marvin L. Oberman
Michael T. Pappas
Barney Reiffen
Alfred Rola
Morris Rosenfeld
Norman Rubinstein
Mark J. Samenfeld
Margaret Sassaman
Seymour J. Schulman
Harold Siegel
Melvin M. Unger
Paul W. Weitz
Mitchell F. Wieser
Kenneth Winick
Solomon A. Zadoff
David Zernoske

family album

Alumni Association

The Alumni Association extends a warm greeting to the Class of 1949. On your graduation from Cooper Union you automatically become members of the Association, joining a large and distinguished family of men and women in the professions of art, architecture and engineering. They are bound together by the common heritage of Peter Cooper's legacy and are proud to perpetuate the principles which he sought to realize through the establishment of The Cooper Union for the Advancement of Science and Art.

The purpose of the Alumni Association is twofold. It is to continue to make available for graduates the personal, professional and cultural stimuli provided by the school during their undergraduate years and to repay the debt they owe to Peter Cooper by contributing to the progress of the school for the benefit of succeeding generations of students.

In fulfilling this purpose, we are also fulfilling Peter Cooper's purpose in founding our Alma Mater, as expressed in the Deed of Trust in the following words: "to . . . contribute in every way to aid the efforts of youth, to acquire useful knowledge, and to find and to fill that place in the community where their capacity and talents can be usefully employed with the greatest possible advantage to themselves, and the community in which they live."

Our program of activities is geared to meet the needs of all our members. Along professional lines, for the engineers we have a refresher course in which they can brush up for the Professional Engineers' License Examina-

Bottom Row: l. to r. *Elizabeth Schoen, A. J. Wohlgemuth, Philip S. Anthes, William Goldsmith, W. O. Christ, Flora Fergenson;* Second Row: l. to r. *William Lukacs, George Clark, Samuel Cooper, Fred Caiola, Irving H. Fisher, Frank Ryder, Frank Spitaleri, J. Frank Johnson;* Top Row: l. to r. *Joseph Meltzer, George Fox, Carl Bussow, Irving Warshaw, H. C. Cuttica, Bernard Last.*

tions. For the artists, there is a sketch class which meets weekly to do sketching from life. Regular monthly meetings feature informative addresses on timely subjects of technical or general interest, followed by a social hour. The speakers are often our fellow alumni who have achieved distinction in their respective fields. During the summer, outings to Green Engineering Camp take the place of the meetings.

The Alumni Association seeks to secure public recognition of the achievements of Cooper Union and its graduates, and help every student and alumnus into a position where his abilities are put to the best possible use, thus fulfilling Peter Cooper's dream of a powerful influence for good in the community.

The official publication of the Alumni Association is the Alumni News, which comes out monthly during the academic year. It keeps the members posted on the activities of the Association, the progress of fellow alumni and developments at the school.

The Alumni Association Placement Bureau provides a valuable service to graduates seeking new positions. It is recognized by leading industrial firms as a rich reservoir of well-trained professional people.

The clubhouse, on West 53rd Street in mid-Manhattan, is conveniently located for meetings, lectures, and rendezvous with friends. Its lounge is open to members and their friends weekdays and evenings.

The Alumni Association has experienced an unprecedented spurt in membership during the past year. With this growth, it hopes to reach a position of greater usefulness. It looks to the younger members, among whom the Class of 1949 are now taking their places, for fresh stimulus and active participation in all its functions and services to Cooper Union, to its alumni and to the community. You will be kept informed of your Association's activities and functions, and your fellow alumni look forward to seeing you at meetings and other get-togethers.

We of the Alumni Association welcome the Class of 1949 into our ranks and your assistance and support in bringing to their fullest realization the hopes of Peter Cooper for a richer life and a better world.

Officers

William Goldsmith
President

Philip S. Anthes
1st Vice-President

A. J. Daidone
2nd Vice-President

A. J. Wohlgemuth
Secretary

W. O. Christ
Treasurer

George Clark
Editor-in-Chief

Flora I. Fergenson
Executive Secretary

Ed Gregg—Head Chancellor

Irv Hammer—Vice Chancellor

Gladys Torres—Secretary

Jonas Harrison

Eli Rubin

Ben Luberoff

Chris Young

Vic Liebowitz

Ernie Oppenheimer

Myron Manes

Irv Begelman

Bernard Hillman

Jack Friedman

Robert Sheridan

Joe Deare

Cyril Freeman

Harold Grossman

Liz Reiman

Ex Post Facto

Within a fortnight of the mysterious disappearance of Head Chancellor Bob Shapiro (in the fall of forty-seven), the Brothers and Sisters in Ex Post Facto donned the Robes of Darkness and entered into the Temple of Chaos.

Because of this movement underground, Ex Post Facto, the once proud center of Cooper social life, became a whispered word on Campus. Everyone wondered what became of this elite society and Jonas Harrison wondering more than others set out in quest of the answer.

By the dint of his sincerity and his remarkable detection ability, the magnanimous Jonas Harrison unveiled the secret rituals and fantastic orgies of the next Ex Post Facto. The true uncensored version of the Harrison Report has been surreptitiously engraved on this page. To read it merely rub some lemon juice lightly over the page and hold it up to the light.

The editors and staff of the Cable realize the serious repercussions that might occur if the Harrison Report ever fell into the hands of the faculty. In spite of this we felt it was our duty to print it in order that you should know where to look for leadership in the coming Grand and Glorious Revolution in Cooper Campus Life. As an act of loyalty to the Grand and Glorious Student Body and to the Grand and Glorious Proposed Constitution of the same, we beseech you to commit the Harrison Report to memory, rip it out of the yearbook and burn it before any member of the faculty sees it.

Top row, l to r: *Myron Manes, Vic Liebowitz, Irv Begelman, Gladys Torres, Elizabeth Reiman, Chris Young.* Center row l to r: *Robert Sheridan, Bernard Hillman, Ernest Oppenheimer, Joseph Deare, Ben Luberoff.* Bottom row, l to r: *Al Rubin, Ed Gregg, Irv Hammer.*

The time has come to speak the truth. After years of deluding the general public, as well as ourselves, into believing that Lambda Tau is a fraternity, it is time somebody shed some light on the subject.

Lambda Tau is not a fraternity in the strict sense of the word. It is more than that. It is the honorary society of the *Pioneer* and as such, has something other groups do not have. All members of Lambda Tau have at one time or another taken an active interest in the publication of the *Pioneer* and as such, have been united by a common bond of accomplishment.

To become eligible for Lambda Tau, one must have worked on the *Pioneer* in an editorial capacity for not less than ten issues.

The main activity of Lambda Tau is throwing or running parties, which it does at inconvenient intervals throughout the school year. However, these parties are not restricted to members of the group, since all *Pioneer* staff members as well as anybody else with enough moolah to pay the door charge are also invited.

Drop into the *Pioneer* office any lunchtime and you'll probably see the officers of Lambda Tau. There is Don Weinblatt, *Pioneer* editor emeritus, who is the exalted and revered Grand Chancellor. Sam Starr, the author of the *Pioneer* "brain" column, is Chancellor of Vi— (that is, Vice Chancellor). Norm Perry, co-editor of the rag, is recording secretary while Murray Greenberg, former associate editor, is corresponding secretary. A man everybody wants to know is Hank Hirsch, our Chancellor of the Exchequer. Hank was co-editor of the *Pioneer* until he broke out of his strait-jacket.

Well, that's us. Drop in and see us sometime. Visiting hours are from 5 to 12 on alternate Fridays.

Top row, l to r: *J. Spool, S. Kugler, R. White, A. Klein, C. Klein, S. Brody. Center: W. Landauer, J. Goldin, W. Warshofsky, G. Marin, B. Fisher, H. Margolis, D. Young.* Seated, l to r: *N. Perry, S. Starr, D. Weinblatt, H. Hirsch, C. Freeman.*

Officers

Don Weinblatt	Chancellor
Sam Starr	Vice-Chancellor
Hank Hirsch	Exchequer
Norman L. Perry	Rec. Sec'ry
Murray Greenberg	Corr. Sec'ry

Members: *Arthur Klein, Gil Marin, Dave Young, Jim Spool, Joe Turtil, Levi Cohen, Cy Freeman, Sol Brody, Bernie Fisher, Stan Kugler, Joe Engelberg, Bill Warshofsky, Marty Elkort, Marvin Dean, Harold Margolis, Milton Marder, Henry Schwartzberg*

Lambda Tau

Bottom Row: l. to r. *B. Harris, R. Bassemir, H. Hochstadt, A. Ariessohn, E. Oppenheimer, S. Shapiro;* Second Row: l. to r. *E. Glaser, H. Roth, W. Haberman, J. P. Friedman, A. Tepfer, S. Smith;* Third Row: l. to r. *A. Estin, K. Halbert, M. Lawrence, N. Hauser, P. Hofmann, W. Hickman, I. Rosner;* Fourth Row: l. to r. *M. Corin, C. Peterson, I. Chernoff, E. Feldman, D. Gross, M. Aronoff, T. Matcovich;* Top Row: l. to r. *K. Winick, M. Hellstrom, M. Wieser, S. Weiner.*

Tau Beta Pi

Officers

Harry Hochstadt
President
Arthur M. Ariessohn
Vice President
Sol Shapiro
Treasurer
Robert W. Bassemir
Recording Secretary
Herbert H. Roth
Corresponding Secretary
Kurt P. Halbert
Cataloger

After two decades of the existence of an independent Cooper Union engineering honor society, Mu Alpha Omicron, the New York Iota Chapter of Tau Beta Pi was founded on January 11, 1947. All members, undergraduate and graduate of MAO, were made eligible for initiation into the national organization. To be admitted to TBP, an upperclass engineering student, in addition to the possession of a relatively outstanding scholastic rating, must be a cooperative, responsible, and companionable human being.

New York Iota has performed a service of considerable value to its Alma Mater this year. The summer tutoring program was continued and proved to be a success by the statistics on the relative grades of the students who took advantage of the opportunity. TBP has been active in fostering the acceptance of the policy of faculty rating by students. The experiment conducted by the Physics Department in this field during the year showed the plan's feasibility.

Chapter President Harry Hochstadt was chosen to represent the chapter at the annual National Convention at Austin, Texas in October of 1948. There, as a guest at the University of Texas he was wined and dined in a manner befitting his lofty station. The Cooper Union chapter also feasted at its main social function at the Hotel Empire on the evening of March 26. In addition to alumni, faculty, and undergraduate brothers, all precedent was shattered by the presence of ladies at the dinner. A formal initiation ceremony for new brothers was the big event of the evening.

For the first time in the short history of NY Iota, the undergraduate membership is at "full strength" because the draft depleted classes have departed. The future will see TBP continue as a major source of service and honor to The Cooper Union.

Staff Members

Frederic H. Miller
Faculty Adviser
Giles G. Green
[N. Y.-Iota]
Frank Herman
[N. Y.-Alpha]
Walter Landauer
[N. Y.-Iota]
Seymour S. Levander
[N. Y.-Iota]
Frank C. Mirgain
[Ind.-Alpha]
Arthur H. Radasch
[N. Y.-Iota]
Ernest H. Salter
[N. Y.-Iota]
Ernest W. Starr
[N. Y.-Delta]
Norman L. Towle
[Mass.-Alpha]
William A. Vopat
[N. Y.-Iota]

Beta Rho Beta

Top row, l to r: *S. Lazerus, J. Turtil, H. Silfin, E. Gregg, S. Davidson, E. Oppenheimer.* Bottom row, l to r: *C. Freeman, B. Hillman, J. Friedman, D. Young, H. Hirsch, J. Deare.*

Joe Deare
Vice-Chancellor

Cy Freeman
Vice-Chancellor

Jack Friedman
Vice-Chancellor

Bernie Hillman
Vice-Chancellor

Hank Hirsch
Vice-Chancellor

Dave Young
Vice-Chancellor

Saul Davidson
Sub Vice-Chancellor

Ed Gregg
Sub Vice-Chancellor

Ernie Oppenheimer
Sub Vice-Chancellor

Howie Silfin
Sub Vice-Chancellor

Joe Turtil
BS

Stan Lazerus
Photographer—Mascot

Known and feared throughout the school is a sinister group of ten ME's who have banded together in a fun-loving organization known as Beta Rho Beta, or Alcoholics Synonymous. The group was originally formed almost three years ago in the back row of Prof. Griswold's Kinematic Klass. When first formed, their ideals were very low, but since then they have deteriorated considerably. Early in their history, they established headquarters in the back room of McSorley's Old Ail House. This group works on the seditious premise that it is possible to attend Cooper for more than four years and still have fun on the side. Requirements for joining are strict. Candidates must prove that their intellect is capable of maintaining the level established by BRB. Anyone with an I. Q. of over fifty is automatically excluded.

BRB is by its very nature autocratic. No decisions whatever are made by the general membership. All decisions are made by the Board of Vice-Chancellors who possess the absolute power of veto. At present there are six Vice-Chancellors with four Sub Vice-Chancellors. In addition to the Board, there is a full time employee of BRB who is an E.E. (you should pardon the expression). This employee handles all business that may arise, and carries the title BS. There is also a mascot and whipping boy who though he is a ChE officiates as the organization's photographer. Social diversions include trips to Green Camp and the theater (both legitimate and Union City). BRBoys have a habit of getting their fingers into most of the extra-curricular work in the school. If they were ever exposed, it would be found that they wield great influence in the Cable, the Pioneer, the Athletic Association, Class Night, and the Rifle Club. At one time the President of the Student Council was a BRBoy.

One mascot of BRB has not been discussed. Her name is Penelope, or the roll-over express. She can best be described as a 1936 Black four-door Plymouth wreck. In spite of all the unkind things said about her, people still ride in her, sometimes as many as sixteen at a time. The anthem of BRB is an Indian Folk Song known as "By the Shores of Lake Tzeluches." Because the BRBoys consider it sacred, it will not be published here.

Top Row, l to r: *E. Reshotko, O. Taccogna, H. Bernstein, A. Messing, F. Kirr.* Second Row, l to r: *C. Freeman, J. Friedman, R. Hohenberg, S. Kugler, E. Oppenheimer, A. Kaplan.* Third Row, l to r: *K. Richter, M. Levitsky, J. Nudelman, F. Warner, B. Fishmonger, E. Gregg, H. Silfin, R. Sheridan, D. Young, G. Rothmaler, S. Davidson, R. Spies.* Fourth Row, l to r: *R. Horky, J. Meienberg, C. Rohmann, Mr. E. Bogusz, B. Hillman, H. Hirsch.* Bottom Row, l to r: *J. Goodman, R. Komarow, W. Haberman, D. Gross, J. Deare, K. Halbert.*

Charles P. Rohmann
Chairman

Frederick L. Warner
Vice-Chairman

Raymond H. Horky
Secretary

Robert Ronchetti
Treasurer

American Society of Mechanical Engineers (day)

The Cooper Union Day Student Branch of the American Society of Mechanical Engineers exists primarily to assist the student develop professionally in aspects which the ordinary class does not present. During the year, the Day Student Branch here at The Cooper Union presents a program consisting of talks by prominent engineers, technical movies, and plant trips. Such a program is of considerable value to the day student, as he ordinarily does not possess much industrial experience. Often the day student is unaware of many of the tasks ordinarily performed by the mechanical engineer.

During the past year the ASME held its annual meeting here in New York. Many of the day students acted as student aids at the various sessions. All who did so had an excellent opportunity to attend some interesting meetings.

The day branch does not confine itself to purely professional matters, however. For each year during the past 25 years the branch has sponsored the annual ASME Christmas Dinner at which the mechanical engineering students and alumni meet. This year's dinner was held in honor of our late Dean, Professor George F. Bateman, who started the present series of dinners. As usual, this year's dinner will long be remembered by all who attended. Professor Fairchild, the guest speaker, spoke eloquently and amusingly upon his experience in many parts of the world. During the dinner a bookcase was presented to the Mechanical Engineering Department in memory of Dean Bateman, to house the library that he left to the Department.

In scope and character, the Cooper Union Student Branch (Evening Course) of the American Society of Mechanical Engineers is not unlike the parent national organization in its aim to distribute ideas and information of a technical nature to its membership and to aid in professional development.

To accomplish this end, the Branch has held a series of meetings during which student as well as outside guest speakers presented technical papers on topics of student interest. Often meetings were held at which educational films, generally provided by industry, were shown.

In addition, field trips were made to local establishments such as a visit to ocean-going liners of the American Export Company, a visit to the power plants of the Consolidated Edison Company as well as other industrial plants.

For several years, attempts have been made to arrange for an extended field trip during the Spring recess to the Bethlehem, Pa. plant of the Bethlehem Steel Company. Thus far, the Branch has been thwarted in its attempts to arrange for this trip. First, a steel strike, then a coal strike prevented the trip. However, this Spring, there are hopeful indications that this inspection trip may be finally realized.

With the many demands made upon the off hours of the Evening Course student at Cooper Union, the Student Branch provides a unique opportunity for participation in extra-curricular activities without extensive time requirements.

American Society of Mechanical Engineers (night)

Top Row, l to r: *H. Betts, H. Enberg, K. McEwan, H. Sterbenz, C. Weber.* Second Row, l to r: *M. Corin, A. Grove, R. Kline, H. Joseph, D. Zernoske.* Top Row, l to r: *W. Auerbach, B. Wallace, A. Frascella, G. Hirsch, N. Naidish, M. Kalish.*

Albert Rogers
President

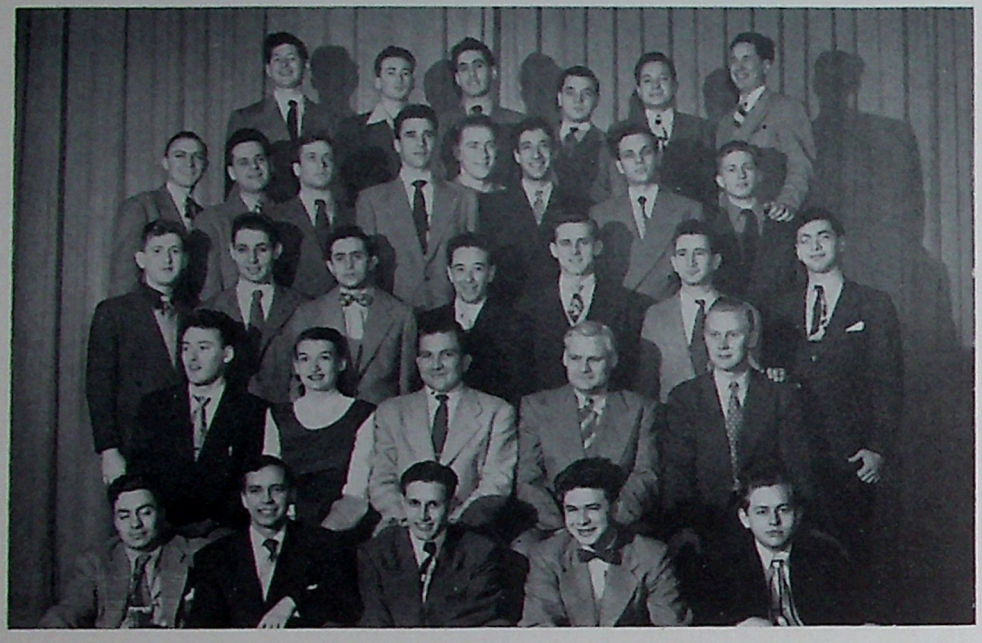
Milton Rabinowitz
Vice President

Harold Lerner
Secretary

Leon Horowitz
Treasurer

Professor Starr
Faculty Adviser

American Institute of Chemical Engineers



Top row, l to r: *M. Schaffer, J. Weil; M. Turken, E. Rottman, W. Kastelman, B. Luberoff.* Second row, l to r: *R. Bassemir, M. Manes, S. Lazerus, W. Goldstein, R. Bemis, D. Schwartz, I. Begelman, F. Dolgon.* Third row, l to r: *J. Feder, H. Hochstadt, L. Chajson, M. Marder, W. Nazarewicz, C. Gordon, A. Klein.* Fourth row, l to r: *R. Sobel, E. Reiman, G. Kaufman, Prof. J. M. Peterson, C. Peterson.* Bottom row l to r: *S. Brody, A. Trujillo, H. Wagner, H. Schwartzberg, N. Perry.*

That resolute band of web-footed neophytes, the CU student branch of the AIChE, embarked on a really ambitious program for the academic year of 1948-49. The major event of the year is to be the metropolitan convention of the student chapters of the AIChE at which the Cooper chaper will be host. This marks the first time that CU has acted as host, the two previous post-war conventions having been held at Columbia and NYU. The agenda of the convention is to include a symposium, on specific aspects of chemical engineering of interest to the students, a luncheon, and a student paper contest. A great deal of work has gone into preparing for this convention and the chapter hopes it will be a great success.

The other major event of the year was the annual Christmas Reception. This reception, which in previous years had been known as the Freshman Reception, underwent the name change because its original purpose, that of interesting freshmen in the study of chemical engineering, has long since been lost. Also, no freshmen ever came. This year's frolic was ably planned by Don Weinblatt, assisted in no small measure by Arthur K-Square Klein, whose long standing friendship with Joe Miller, the original "yuk" boy, proved invaluable. Now that the reception is but a dim memory and the danger of repercussions from the irate department is gone, it may now be revealed that these two also authored the several senior skits.

The chapter has also sponsored several talks by graduate engineers on various phases of chemical engineering not ordinarily touched upon in the classroom. This program of obtaining a wider knowledge of engineering has been furthered by frequent motion picture showings.

Officers

Kaufman, G.
President

Peterson, C.
Secretary

Sobel, R.
Vice-President

Reiman, E.
Treasurer

American Society of Civil Engineers

Like the other professional society student chapters at Cooper Union, the ASCE exists to increase the student's range of contacts with the professional world and to further the feeling of fellowship among students with like interests. Our chapter can boast that it is the only one in the Metropolitan area having 100% student participation among those eligible in the day school.

It can also boast of being the only society in Cooper Union holding an annual contest for student papers on engineering subjects. Through the efforts of Professor Eichler and with the cooperation of a number of men in the Alumni Association, substantial awards are given each year to those students in the ASCE presenting the best papers. Last spring at our annual dance, first and second prize awards (U.S. Savings Bonds) were given to John Hoffman and William Hershleder. This year three prizes have been offered, and it is expected that as the deadline draws near the competition will be severe.

The Chapter holds regular meetings presenting practicing engineers as speakers, motion pictures of interest to engineering students, and papers by students. During the past year a number of field trips to plants and construction projects in the area were made, and a weekend at Green Engineering Camp highlighted the winter season.

One of the chief jewels in our diadem, claiming for us distinction among the student chapters throughout the country as well as in Cooper Union, is the *Cooper Survey*, our mimeographed newspaper. And a further unique function is performed by our publications committee, which maintains a file of current manufacturers' literature for the use of the members in their studies and outside reading.

Special thanks for help and encouragement are due to our Faculty Adviser, Professor Green, and to Professors Eichler and Ely for their continued and helpful interest. And may we wish our new Department Head, Professor Mirgain, a long, happy, and fruitful relationship with Cooper Union.

John Hoffman—Past President

Donald Chilton—President

Joseph Paduana—Vice President

Leon Laster—Secretary

Harvey Sherman—Treasurer

Top Row: l. to r. *G. Marin, G. Gardner, W. Michael, C. Heidengren;* Second Row: l. to r. *H. Wenke, B. Morgenstern, A. Solnick, E. Rubin, H. Semmel, C. Herr, T. Hein, R. Frank, R. Wengraf;* Third Row: l. to r. *H. Margolis, J. Gonick, A. Eck, T. Aster, S. Haug, F. Kovacich, M. Siegel, R. Warshaw, L. Gabrilowitz, A. Robinson; Fourth* Row: l. to r. *J. Paduana, Prof. Giles G. Green, D. Chilton, H. Sherman, L. Laster, R. Bowden;* Bottom Row: l. to r. *E. Nussbaum, D. Bass, F. Housley, N. Feldman, W. Homburger.*

Chapters

Alpha—The Cooper Union
818 Broadway

Beta—City College of New York
23rd Street & Lexington Ave.

Zeta—New York University
818 Broadway

Pi—Long Island University
278 Fulton Street

Upsilon—Brooklyn College
839 Lenox Road

Chi—B'klyn College of Pharmacy
426 Albee Square

Alpha Alumni
818 Broadway

National Headquarters
818 Broadway

Fratres in Facultate

Professor Louis M. Heil
Mr. Howard J. Strauss

Officers

Edwin F. Gregg
Prior

William J. Kastelman
Vice Prior

Milton D. Marder
Exchequer

Jack Nudelman
Recording Scribe

Daniel Schwartz
Corresponding Scribe

Fratres in Collegio

Harry Bernstein
Sidney Chipkin
Seymour Clark
Norman Feldman
Stanley S. Hirsch
Morris Papish
Jack M. Pedowicz
Israel Pisetzner
Harry Rosenberg
Marvin Siegel
Max Stark
Stanley M. Stein

Fratre in Servicio

Julian Babitz

Standing l. to r.: *M. Schnapp, S. Chipkin, M. Siegel, S. Stein, M. Papish, D. Reiff, S. Clark, C. Temes, M. Rosenberg.* Seated l. to r.: *J. Nudelman, M. Stark, D. Schwartz, H. Rosenberg, E. Gregg, W. Kastelman, M. Marder, N. Feldman, S. Hirsch.*

Alpha Mu Sigma

Alpha Mu Sigma is unique in fraternal ranks in that all the married fraters are fathers. *Does fraternal ideal yield to maternal zeal after the Parson's spiel? . . . This is hard to reveal.*

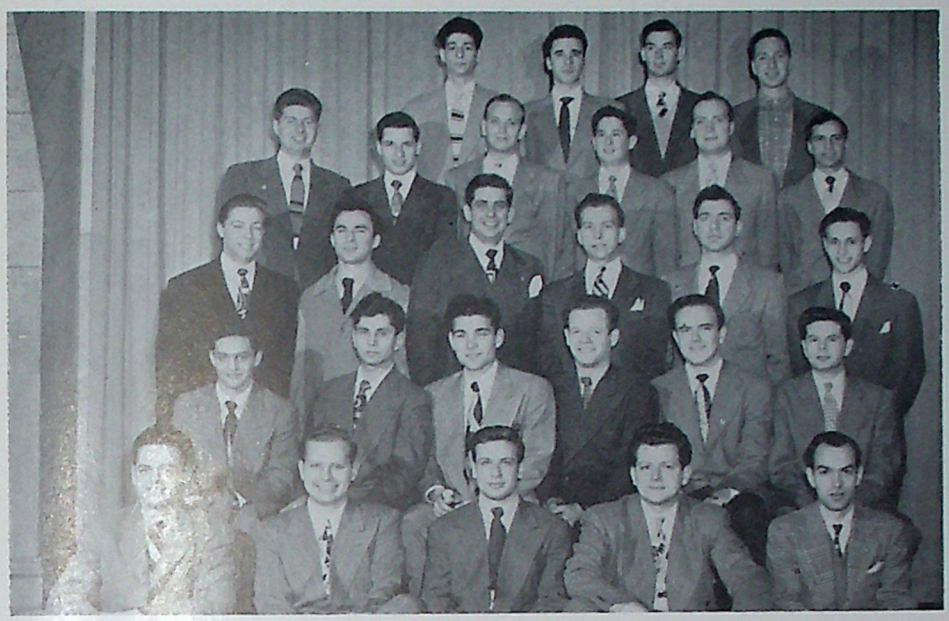
With the revival of our National Governing Body, The Chancery, Interchapter Activities have increased. These include the Annual Dinner Dance (last one was held at the New Yorker), picnics, boatrides and athletic tourneys (basketball, bowling, handball, etc.).

We have recently acquired a fraternity house near the school. Our home away from home has all the features of a lounge as well as of a library. Comfortable couches are provided for just plain relaxation. In addition, drafting tables, typewriters, and textbooks are available in the study room.

Our social activities include numerous parties with sororities, house plans, and our own drags. The Fraternity House is ideal for parties in that there is an aura of a nightclub promoted through the furnishings and combinations of lighting of our enormous ballroom.

The Fraternity has a strong representation in most school activities. Every Brother, while still a Pledgee, is made to realize his debt to Society in General and our Cooper Union Community in Particular.

Alpha Mu Sigma, for all the immediate advantages it offers to an undergraduate Frater, contributes still more throughout his life than is apparent at a casual glance. Alumni, who founded the Brotherhood back in 1914, are still in contact with the younger members as well as their contemporary cronies. They are ever present to lend helping hands.



Top Row, l to r: *W. Warshofsky, W. Goldstein, S. Tenenbaum, J. Goodman.* Second Row, l to r: *L. Laster, B. Fisher, C. Freeman, R. Hohenberg, J. Oxley, A. Trujillo.* Third Row, *S. Shapiro, A. Tepfer, H. Silfin, R. Sheridan, H. Hirsch, H. Wagner.* Fourth Row: *D. Bass, H. Kleinman, J. Friedman, M. Kerman, G. Wrage, D. Young.* Bottom Row: *M. Manes, N. Epner, S. Lazerus, I. Hammer, G. Silbermann.*

Lambda Sigma Kappa

Non-sectarianism, companionship, service to Cooper Union. With these concepts as guides, Lambda Sigma Kappa fraternity was founded in 1905. Since that time, the Fraternity has provided for its brothers an escape from the inevitable worries of life at Cooper Union.

The principles of LSK are demonstrated in the requirements for induction. Consideration of race, color, and religion are absent; only character and scholarship have significance.

Friendship and understanding are encouraged, but expression of the individual is not sacrificed. This is simply proven by examination of the current membership: a group of 35 characters representing about 40 totally different personalities (5 schizophrenics are included).

The Fraternity is well represented in school extra-curricular matters, athletic, and other activities. An LSK team is entered in every intramural athletic tournament. Also, the brothers have done considerable work with *The Cable, the Pioneer, Class Night, Activities Plan,* and other school activities.

One of the conveniences LSK could never offer its membership (until recently) was a permanent meeting place—a "house" of its own. Years of searching were rewarded last summer when an apartment was finally found. The condition of the rooms was remarkably deplorable, but several weeks' work (about 15) by the brothers transformed the shambles into what is now an attractive refuge from the cruel school. The period of wandering has thus come to an end, and with its new home LSK has many happy days ahead.

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Faculty Advisor
Professor H. F. Roemmele
Professor H. W. Merritt
Professor W. A. Vopat
Mr. S. Levander

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Ruler
Max Kerman
Vice-Ruler
George Wrage
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Recording Secretary
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Corresponding Secretary

Fratres in Collegio

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William Beck
Donald DesJardin
Norman Epner
Bernard Fisher
Cyril Freeman
Jacob Friedman
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Jack Goodman
Irving Hammer
Henry Hirsch
Rudy Hohenberg
Max Kerman
Harold Kleinman
Leon Laster
Stanley Lazerus
Myron Manes
Leonard Naphtali
John Oxley
Donald Pearlman
Sol Shapiro
Robert Sheridan
George Silbermann
Howard Silfin
Sol Tenenbaum
Arnold Tepfer
Anthony Trujillo
Herbert Wagner
Willard Warshofsky
Donald Weinblatt
George Wrage
David Young

Omega Delta Phi

Top Row: l. to r. *G. Tsotsos, S. Dardarian, J. MacNair, W. Coughlin;* Second Row: l. to r. *P. Beischer, F. Rinallo, E. Lassen, R. Hockenjos, R. Rising, P. Loraso, D. Curry;* Bottom Row: l. to r. *E. Feher, M. Guarrasi, E. McMullin, N. Xikes, A. Melchiorre, A. Bizjak.*

Alpha Chapter

Leon Ballero
Philip Beischer
Alfred M. Bizjak
Everett Q. Carr
John Churko
David Curry
Sahag Dardarian
Ernest Feher
Ernest Goodness
Michael Guarrasi
Robert Hockenjos
Edward A. Lassen
Edward McMullin
Robert McMullin
Antonio Melchiorre
Pete Peters
Francis Rinallo
Anthony Tompos
Nicholas Xikes

Delta Chapter

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J. Carl Apsley
Bernard J. Byrne
Jules L. Chaboty
William T. Coughlin
William C. Ebeling
William H. Evers
Robert Foss
Robert E. Frank
Craig M. Garretson
William J. Haflin
Theodore C. Hein
Charles A. Herr
J. Edward Hilzinger
John Hoffman
Raymond H. Horky
Frederick L. Horn
Robert P. Kalin
Richard Keates
Stanley G. Krumbholz
Jack T. Meienberg
Casimiro Michelini, Jr.
George H. Mueller
John E. Nolan
Edward C. Norman
Frederick O'Driscoll
Paul A. Parisi
Arthur Pawlak
John Priest
Charles P. Rohmann
Albert A. Romagnoli
Gustave A. Rothmaler
Robert Spann
Michael A. Spronck
Oscar Taccogna
Edmund G. Trunk
Henry H. Von Spreckelsen
Frederick W. Von Zabern
Herbert Weidner
William Wirfel, Jr.

Standing: *C. Herr, H. Weidner, B. Byrne, J. Meienberg, F. O'Driscoll, W. Ebeling, G. Rothmaler, F. Horn, C. Rohmann, R. Horky, H. Von Spreckelsen, W. Evers, R. Frank, M. Spronck.* Sitting: *G. Mueller, A. Romagnoli, J. Nolan, C. Michelini, Jr., J. Priest, R. Spann, C. Garretson, R. Kalin.* Kneeling: *E. Trunk, J. Agresta, P. Parisi, W. Haflin, J. Hilzinger.*

Just after the turn of the century, a group of Cooper Union night engineering students, desirous of fostering the intimate personal friendships formed while in school, decided to form a brotherhood to strengthen, preserve, and extend friendships. In 1913 it was decided to incorporate under the Laws of the State of New York. Thus was formed the first active organized group of students in The Cooper Union, who have always held the ideals, purposes, and standards of the Founder foremost in their actions.

This first group was given a charter as Alpha Chapter in 1915. The Beta Chapter at Brooklyn Polytechnic Institute was formed in 1917. Gamma Chapter, now inactive, was formed in 1925 at New York University. Another chapter was formed at The Cooper Union, this time in the Day School, as Delta Chapter, in 1928. Epsilon Chapter at Brooklyn College is the newest chapter. The Omega Delta Phi has provided for its alumni by an Alumni Organization and a more active Alumni Club.

Since social life at The Cooper Union is limited, especially in the Night School, the fraternity helps provide an outlet from school life and increases the members' social contacts. The yearly calendar is full and varied. Alpha Chapter's smokers, where beer and cigarettes abound, and Delta Chapter's annual Frater-Pledgee party, among others, are always looked forward to. Summer picnics, of which the ODP-PSO picnic and ballgame for possession of the "cup" is a new institution, round out the social year.

Besides conducting the above social affairs and the special fraternity functions, Omega Delta Phi is also interested in scholastic achievement. A candidate for admission must have successfully passed all his first year subjects. Our blackboards see frequent use during the year, the fraters helping pledgees meet this requirement and helping each other.

The proximity of the fraternity rooms, situated at 4 St. Marks Place, to the school, makes them readily accessible to fraters and their friends, both to study and relax in.

Alpha Chapter

Edward McMullin
President

Nicholas Xikes
Vice-President

Robert McMullin
Secretary

Michael Guarrasi
Treasurer

Delta Chapter

George H. Mueller
President

Michael Spronck
Vice-President

Gustave A. Rothmaler
Secretary

John E. Nolan
Treasurer

It was 23 years ago, in 1926, that Phi Sigma Omega was founded. From its very inception it developed into a predominant center of social and scholastic achievements. Each year its members strive to maintain and uphold that position by participating in many of the various scholastic activities and by providing countless social functions which have enjoyed extreme success.

Proof of the tremendous strides Phi Sigma Omega has made in the fostering of scholasticism and fraternalism is exhibited by the fact that seldom have any of its members been obliged to give up their studies because of difficulties in their courses. When a member finds himself confronted with any difficulties he can turn to any of the brothers who will give willingly of his time and knowledge in true fraternal spirit. The brotherhood of Phi Sigma Omega is devoted to the furtherance of this spirit.

The Phi Sigma Omega fraternity house is located at 31 East 7th Street. It is here that the members can be found before class doing assignments, completing reports or simply relaxing in the large comfortable couches and listening to some of the many recordings available. In striking contrast to the quiet serenity just described is the atmosphere of hilarity approaching hysteria that prevails at any of the house parties.

Phi Sigma Omega is proud of its traditions and with the help of its members it will continue to promote close and lasting friendships.

First Row, l to r: *A. Semmelroth, F. Hutchinson, A. Berberich, J. Sidoti.* Second Row, l to r: *W. Lindenfelser, A. Frascella, J. Graham, W. Setzler, L. Korosy.* Third Row, l to r: *G. McLaughlin, R. Hermida, C. Keyser, C. Gallaer, W. Egen, J. Dewender, R. Parsekian, N. Kulba, A. Mann, G. Geisenhainer, R. Horton, P. Hauser, T. Ragozzino.*

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Delta, Brooklyn Polytch.
Gamma, New York University

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Grand Master
Henry Cubberly
Deputy Grand Master
William Lindenfelser
Recorder

Phi Sigma Omega

Louis Korosy
Exchequer

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Gene Campagna
Henry Cubberly
John Cubero
Daniel Davidson
John Dewender
Vincent DiGennaro
William Egen
Robert Ernst
Alexander Frascella
Charles Gallaer
George Geisenhainer
James Graham
Thomas Harding
Raymond Hermida
Robert Horton
Max Johl
Louis Korosy
William Lindenfelser
Robert Lubinski
David Matson
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William Neuner
Richard Parsekian
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Sidney Kaufman
Edward Neidorf
Charles Schneider
Murray Silverman
Harry Spett
Meyer Zonis
Charles Schneider
Harry Spett
Robert Kanzler
Murray Silverman
Edward Neidorf

Two years ago, Sigma Kappa Tau made its appearance at Cooper Union in May of 1947. It was only a six-man organization then—five officers and one member with a lot of starry-eyed ideas. Three fellows who'd been in the Navy and keenly felt the rigid restrictions of Cooper Union when they returned and three guys who felt that they'd missed out on the fancy free life of the Navy during the war, made a perfect combination for social unrest in a pleasant sort of way.

A lot of spouting off was done about all Cooper ought to be but wasn't, and why couldn't we do something about it?

It took a long time to realize that we couldn't upheave even a small institution overnight. There were just too few people who could see the light.

It wasn't that we of SKT had no appreciation for the fine things Cooper stood for—her high standards and homey smallness, but we did feel keenly the things that Cooper lacked—the social life, the variety of people, the collegiate atmosphere of receptiveness to new ideas, mad though they might be.

Maturity and habit have finally taken hold though and the wild yearning has gradually simmered down to a more reasonable and conservative approach. In its place has risen the determination to build an organization that will embody the things we hold to be so desirable—the social contacts, the firm friendships, the broadness of outlook and interests, the union of many different people—not as a retreat from school, but as a starting point from which to work toward a better fuller school life for all the students.

Top Row, l to r: *S. Kaufman, R. Kanzler.* Second Row, l to r: *B. Graham, W. Edge, W. Horozan, H. Spett, M. Silverman, H. Davison, E. Neidorf, R. Boxer, C. Schneider, M. Zonis.* Bottom Row, l to r: *J. Acker, R. Comninos, W. Honig, J. Deare, H. Cohen.*

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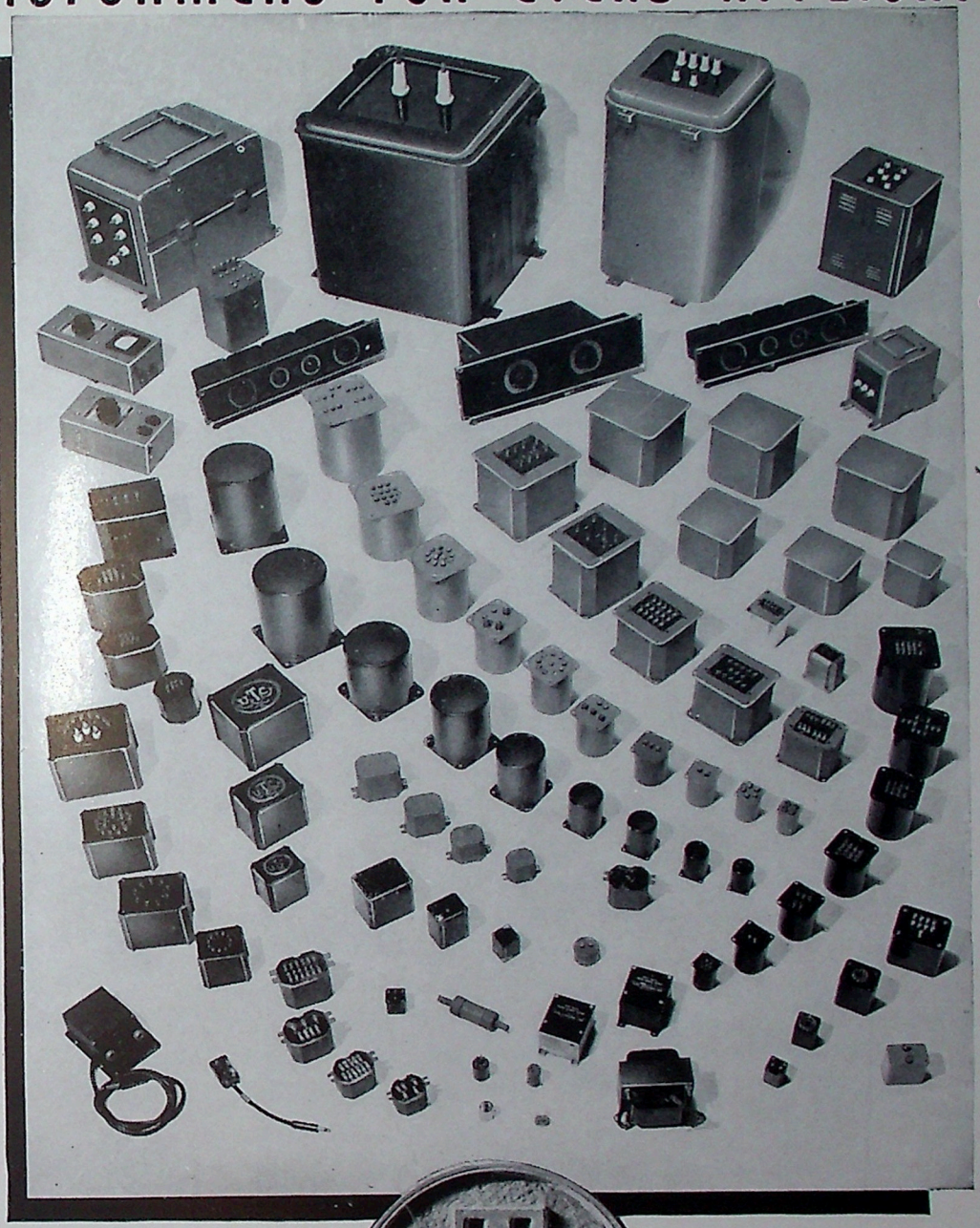

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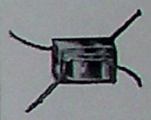

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THE **CABLE**

cooper union for the advancement of science and art

ninetieth anniversary issue . . . 1859—1949

Cooper Union
Cooper Square
New York City

May 10, 1949

Dear Reader:

This book was an experiment. The usual format of the Cable has been radically revised, and wherever possible from both financial and production considerations the editorial staff incorporated new ideas into the yearbook. The most important of these was a theme running throughout the entire book and centering around *In Retrospect*, the section of the yearbook on the history of the Cooper Union. Other new features of the '49 Cable were a photo story, a calendar, and a sketch book.

These were attempts to portray life at Cooper in an interesting and novel manner.

Financial and production difficulties resulting from a lack of student support and participation necessitated certain revisions in the format. Some of the changes were the elimination of a second color from the book, a reduction in size of the calendar and photo story sections. The one change, however, that really struck home was the smaller size of the graduate pictures. The students can blame no one but themselves for these changes, which were the result of their apathy toward the yearbook.

Because of the general disinterest, the '49 Cable was produced by a limited staff. Irv Hammer, Mike Manes, Vic Liebowitz, Ernie Oppenheimer, Bernie Hillman, Chris Young, Gladys Torres, and Edwin Gregg deserve more than mere mention. In the face of staff difficulties these people carried an unusually heavy burden on their shoulders. Without their sincerity and capacity for doing spade work, the yearbook would still be an idle dream.

Others who rendered invaluable assistance in the production of the '49 Cable were Art Fleisher of Comet Press (for taking the editorial staff under his wing), Professor Raymond Dowden (for getting the more rambunctious and enthusiastic editors out of torrid misunderstandings), and to Jo Dean and Madge Ferstler (for helping the staff meet its production deadlines).

Reminiscing and looking toward the future, it is evident that the Cable is gradually becoming two books interwoven into one—a yearbook and a magazine. This is a logical method of pleasing both a small senior class as well as the more numerous lower termers. Next year, the editor-in-chief of the '50 Cable will be Irv Hammer. He has an excellent understanding of the production of the Cable and is keenly aware of the shortcomings of the '49 Cable and of their causes. Undoubtedly, he will produce an even better yearbook than the '49 Cable. However, he cannot do this without the financial support and production assistance of both students and staff. Since Cooper Union has the best engineering and art school in the country, there is no reason why the yearbook should not be a leader in American literature, photography, art work and layout. It is something worth thinking over.

Sincerely yours,

Eli A. Rubin

editor-in-chief
the '49 Cable

REPORT OF CONDITION OF

CORN EXCHANGE BANK TRUST COMPANY

At the close of business December 31, 1948

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

ASSETS		LIABILITIES		
Cash in Vaults and Due from Banks	$252,158,166.83	Capital	$15,000,000.00	
U. S. Government Securities	461,604,740.42	Surplus	25,000,000.00	
State, Municipal and Public Securities	12,574,873.40	Undivided Profits	5,036,864.11	$45,036,864.11
Federal Reserve Bank Stock	1,200,000.00			
Other Securities	849,940.00			
Loans and Discounts	80,285,296.75	Reserve for Taxes, Expenses, etc.		1,681,082.81
Real Estate Mortgages	710,593.92	[redacted]		
Customers' Liability on Acceptances	725,319.47	Acceptances Outstanding	$1,775,439.46	
49 Banking Houses	7,705,776.64	Less: Held in Portfolio	656,746.76	1,118,692.70
Accrued Income Receivable	1,866,582.42	Deposits		772,123,408.27
Other Assets	278,758.04	(Includes $11,372,183.35 U. S. Deposits)		
	$819,960,047.89			$819,960,047.89

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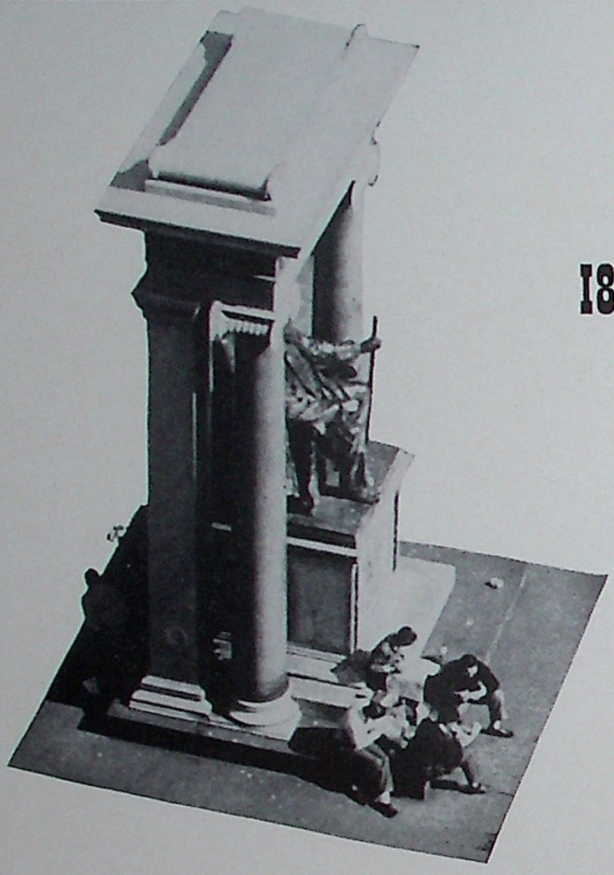

1859-1949

IT WAS PETER COOPER'S WISTFUL AMBITION to be present during the 90th Anniversary Celebration of the founding of the Cooper Union. Had he lived, he would have been a mellow 158 years old! Yet, to this merchant-philanthropist such a thought did not seem too unreasonable. Did he not design and build the first locomotive in America? Did he not promote and finance the laying of the Atlantic Cable?

1859 was a year of fabulous dreams and much destiny. The first petroleum well was opened in Pennsylvania and a gaunt fanatic named John Brown led an abortive raid on a sleepy town in Virginia. It was a good time for the founding of The Cooper Union "for the Advancement of Science and Art."

Were he alive today, Peter Cooper would have enjoyed this yearbook. It is a graceful chronicle of past and present, prepared with high good humor.

We here at Comet Press are proud to have worked with Eli, Vic, Mike, Irv and all the gang in producing this fine keepsake.

The Comet Press, Inc. • **200 Varick Street**
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